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POST-CLOSURE LIABILITY TRUST FUND SIMULATION MODEL

VOLUME I: MODEL OVERVIEW AND RESULTS

Office of Solid Waste
U.S. Environmental Protection Agency

May 1985

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These volumes are the appendices to EPA's Report to Congress under Section 301(a)(2)(ii) of CERCLA. The report assesses the need for and adequacy of the revenue raised by the Post-Closure Liability Trust Fund (PCLTF) in relation to its estimated future requirements. EPA used a computer simulation model to estimate the range of potential revenues, expenditures and annual balance of the PCLTF. Detailed descriptions of the computer model and the simulation results are contained in these three volumes of appendices.

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VOLUME I: MODEL OVERVIEW AND RESULTS

Office of Solid Waste
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PREFACE

This report is the joint effort of two co-contractors, ICF Incorporated and Battelle Pacific Northwest Laboratories. Battelle Pacific Northwest Laboratories developed the Release Simulation Model, a model that predicts facility releases. ICF Incorporated developed the overall Post-Closure Liability Trust Fund Simulation Model, which uses the results of the Release Simulation Model to assess the adequacy of the PCLTF.

This report is organized in three volumes, as follows.

Volume I, "Model Overview and Results," introduces the Post-Closure Liability Trust Fund and presents background information on the RCRA program; describes in general terms the PCLTF Simulation Model and how it is used; presents Model results for five simulations; presents an analysis of the revenue requirements under alternative Fund coverage policies; and presents a discussion of necessary limitations and next steps.

Volume II, "Graphs and Tables of Model Results," presents the graphs and tables that contain the Model results discussed in Volume I. Volume II is separately bound so that the reader can conveniently peruse the Model output when reading the Volume I report.

Volume III, "Appendices," contains four appendices that provide technical detail on various aspects of the Model. Appendix A presents detail on methods, data and assumptions used in the PCLTF Simulation Model. Appendix B provides detail on the Release Simulation Model. Appendix C describes several aspects of model implementation for both the PCLTF Simulation Model and Release Simulation Model, including run characteristics, subroutines, data files, random number generators, and statistical properties of the results. Appendix D reproduces the set of options available to the Model user.

This study was conducted under the guidance of EPA's Office of Solid Waste. Ms. Carole Ansheles, the Project Officer, and her associate Mr. Richard Allan were in charge of this project. Mr. Peter Guerrero was the former Project Officer.

CHAPTER 1

INTRODUCTION

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) provides for two complementary funds to address problems posed by inactive hazardous waste sites:

- The Hazardous Substance Response Fund, established by Section 221, to be used for the clean-up of sites that are currently inactive; and

- The Post-Closure Liability Trust Fund, established by Section 232, to be used for response, care, and compensation in the future for disposal sites that are currently active.

Each fund serves a different purpose and has different financing arrangements. The Response Fund (often referred to as "Superfund") is used for current problem sites and is funded mostly by a tax on feedstocks to the chemical production process. The Post-Closure Liability Trust Fund (PCLTF) is funded by a tax on hazardous waste disposal and is designed to address long-term problems at permitted hazardous waste land disposal facilities. Because of the many uncertainties about the provisions and implementation of the PCLTF, Congress mandated that several key analytical studies be performed.

The work represented by this report was motivated by one of these congressionally-mandated studies: an analysis by the Environmental Protection Agency of the adequacy of the revenues to be raised for the PCLTF in relation to its estimated future requirements. The purpose of this effort by ICF Incorporated and the Battelle Pacific Northwest Laboratories is, therefore, to assist EPA in preparing the analysis.

An analysis of Fund adequacy must be based upon a projection of inflows and outflows of funds that will occur over a very long period of time. This report presents a model of these flows and the results of analyses undertaken using the Model. These results are not final. The model on which they are based will undergo further testing, revision, and inclusion of new data on the basis of which new estimates of Fund adequacy will be prepared. This analytical effort can also assist EPA in other related studies as well as in a variety of regulatory policy analysis projects.

The remainder of this chapter is organized as follows. Section 1.1 discusses key statutory provisions relating to the Fund and Section 1.2 provides an overview of our approach to this phase of overall model development.

1.1 SUMMARY OF CERCLA POST-CLOSURE PROVISIONS

The post-closure provisions of CERCLA were designed to:

(1) finance, at closed disposal facilities, long-term post-closure monitoring, maintenance, and cleanup necessary to protect human health and the environment; and

(2) assume fully the liability of owners and operators for any damages to third parties incurred after site closure, and to pay the costs of those liabilities.

A facility must meet three requirements in order to take advantage of these provisions. First, the disposal facility must have received a final permit under Subtitle C of the Resource Conservation and Recovery Act (RCRA). Facilities that close while they are still in interim status will not be covered by the PCLTF.[1] Second, the facility must have complied with each condition of its permit and applicable RCRA regulations. These include closure and post-closure requirements as well as design and performance standards (e.g., requirements for liners).[2] Finally, the facility and its surrounding area must be monitored for up to five years after closure to demonstrate that there is "no substantial likelihood" that hazardous substances will be released from confinement (or migrate off site) or that "other risk to public health or welfare" will occur (see Section 107(k)(1)).

These three requirements were intended to limit PCLTF coverage to those sites which have fully complied with RCRA standards and have a proven record of performance. This limiting of fund coverage to "low-risk" sites had been expected to reduce the likelihood that the PCLTF would be significantly depleted by a single incident. Furthermore, those who drafted the PCLTF had hoped that the existence of a fund to pay future damage claims and to clean up releases would aid in the siting of new hazardous waste disposal facilities by helping to assuage concerns over long-term care and compensation after facility closure.[3]

The PCLTF is to be financed by a tax that is fixed over time at $2.13 per dry-weight ton of hazardous waste received at disposal facilities. The tax went into effect on October 1, 1983; it is only collected when the (unobligated) balance of the Fund does not exceed $200 million in the previous year. The tax may be subject to the Act's sunset provision.

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[1] Such facilities may fall under the jurisdiction of CERCLA's Hazardous Substance Response Fund.

[2] See EPA, "Hazardous Waste Management System; Permitting Requirements In Land Disposal Facilities," 47 FR 32274.

[3] See Environmental Emergency Response Act, S. Rep. No. 96-848 (S. 1480), 96th Cong., 2d Sess., 1980, pp. 90-91.

CERCLA specifies how PCLTF funds may be used. Apart from some specific issues of legal interpretation,[4] funds may be used to pay for the costs of:

- monitoring, response, and cleanup;
- assessing damages to natural resources;
- restoring or replacing natural resources;
- assessing health effects;
- "other compensation for injury or loss under ... any other State or Federal law"; and
- routine care and maintenance incurred by parties other than facility owners or operators after a defined period (i.e., 30 years).

1.2 OVERVIEW OF APPROACH

Any assessment of the adequacy of the PCLTF must take into account two key facts:

(1) The demands on the PCLTF are uncertain because the current estimates of the likelihood and timing of events that will result in Fund expenditures are very uncertain (e.g., releases from facilities that gain eligibility for the Fund).

(2) The supply of funds to the PCLTF is uncertain because it is a function of the amount of future hazardous waste land disposal.

Thus, it is essential to design a model that can account for these uncertainties. This was done by constructing a model based on principles of probability and statistics that can simulate particular aspects of the hazardous waste situation which are highly uncertain. This approach, referred to as stochastic (or Monte Carlo) simulation, permits the user to see the effects of uncertainty on estimates of the future Fund balance.

Because of the great uncertainties involved in projecting future waste disposal and future facility releases, and because new and better information is continually becoming available, EPA sought a model that would: (1) make it possible to test both the effects of various alternative assumptions regarding technical and policy matters and the effects of alternative data bases; and (2) be easy to update and change as new information becomes available and as the policy process deals with new issues. EPA's goal in developing this model is, in addition to examining the adequacy of the PCLTF, to create a tool that can be used to enlighten the debates that inevitably surround complex regulatory issues.

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[4] For an analysis of these issues, see ICF Incorporated, "Planning for the Post-Closure Liability Trust Fund," a report submitted to the Office of Solid Waste, U.S. Environmental Protection Agency, November 1982.

This modeling effort was designed to proceed in discrete stages. The first stage was a one-month feasibility and preliminary design study.[5] The second stage had the goal of producing a simplified, operating model. The results of the second phase were reported in January 1983.[6] Comments on the model methodology and data were received from a five-member peer review group and other EPA personnel.[7] Based on the reviewers' comments and insights gained from the results of the simplified model, priority areas for model enhancement and additional data analyses were defined. During the third stage, numerous refinements to the model were implemented in order to represent more closely the costs that would arise at hazardous waste disposal facilities as the result of the detection of releases into groundwater. Modifications were made to reflect the Agency's new land disposal regulations[8] and to improve the estimates of potential third-party claims. Data on the existing population of hazardous waste disposal facilities were significantly improved through the incorporation of information collected by EPA in the National Mail Survey of RCRA-Regulated Hazardous Waste Handlers and in the EPA-sponsored Telephone Verification Survey.

The purposes of this report are:

- to describe the revised Model developed in this third stage of the study; and
- to present estimates of the PCLTF balance over time under various assumptions about EPA policies, Fund policies, and other relevant factors.

It should be emphasized that numerous EPA policies regarding the implementation of the PCLTF have yet to be established, and that the policy assumptions used in this report do not necessarily reflect current or future Agency policies. Alternative policy assumptions can alter the estimates of the future PCLTF balance, sometimes significantly. Consequently, the results presented here must be viewed as contingent on the assumptions upon which they are based.

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[5] ICF Incorporated, "Preliminary Design of a Computer Model for the Post-Closure Liability Trust Fund," prepared for the Office of Solid Waste, U.S. Environmental Protection Agency, January 1982.

[6] ICF Incorporated and Battelle Pacific Northwest Laboratories, "Post-Closure Liability Trust Fund Simulation Model: A Draft Report on Model Methodology and Illustrative Results," prepared for the Office of Solid Waste, U.S. Environmental Protection Agency, January 1983.

[7] ICF Incorporated, "Report on Peer Review of Post-Closure Liability Trust Fund Simulation Model," February 18, 1983.

[8] 40 CFR 264, Subparts F, M and N and revisions to Subparts K and L.

This report was drafted without continually including caveats regarding assumptions and data limitations. Chapter 6 enumerates many of the more important assumptions and data limitations of the current version of the Model. Because it is as important to understand the limitations of models as it is to understand their results, Chapter 6 is an essential part of the report.

The remainder of this report is organized as follows:

- Chapter 2, Model Overview, provides an overview of the entire Model, including definitions of key terms, identification of factors included in the Model, and descriptions of the relationships among key Model factors.
- Chapter 3, Model Use, describes how the Model is used and interpreted.
- Chapter 4, Simulation Results, presents the results of five simulations.
- Chapter 5, Revenue Analysis, presents estimates of the revenue needed to maintain Fund solvency under various Fund coverage policies.
- Chapter 6, Major Limitations and Next Steps, highlights the major uncertainties and assumptions embedded in the Model as well as the potential of further analysis to improve the Model.

Volume II presents graphs and tables of the results that accompany Chapter 4.

Volume III describes the technical details of the Model and includes the following appendices:

- Appendix A, Detailed Model Description and Data Analysis, provides details on the data and methods used in the Model. Each factor included in the Model is defined and the data used to estimate each factor are presented.
- Appendix B, Release Simulation Model, provides details on the data and methods used to simulate releases.
- Appendix C, Model Implementation, briefly describes the run characteristics of the Model, its space requirements, and the pseudo-random number generators used to drive the stochastic nature of the Model.

- Appendix D, User Options, provides a copy of the inputs to the Model over which the user can easily exercise control. The values displayed in this appendix were used in Simulation 1 presented in Chapter 4.

6

CHAPTER 2

MODEL OVERVIEW

This chapter presents a non-technical overview of the PCLTF Model. Section 2.1 describes the design objectives for the Model and Section 2.2 describes the type of model chosen. Section 2.3 presents, in simplified terms, the basic "building blocks" of the Model. The building blocks are the lowest level or most disaggregated components of the Model. By identifying these fundamental building blocks and the relationships among them, the complex Model analyses are broken down into simplified parts. Section 2.3.1 describes the most disaggregated components of the Model, called Basic Units. Section 2.3.2 describes the relationships among the Basic Units.

Although this chapter identifies and defines the Basic Units and relationships, it does not describe in detail the manner in which they are estimated. A more detailed and technical description of the Model is presented in Appendices A and B, including a full description of the data analyses and methods underlying the various components of the Model. The reader may selectively refer to these appendices for details on individual components of interest.

2.1 MODEL DESIGN OBJECTIVES

In order for the PCLTF Model to help enlighten the debates surrounding various PCLTF regulatory issues, the Model itself had to remain as uncontroversial as possible. Consequently, the primary objective in the design and implementation of the PCLTF Model was to develop an unbiased and neutral tool for examining the adequacy of the PCLTF.

To attain the status of a neutral analytical tool, a model was needed that could incorporate a wide range of possible assumptions regarding regulatory policies, physical phenomena, legal issues, and economic conditions. By developing and using such a model, the debates and analyses could appropriately center on the choice and estimation of key assumptions and input factors, while the model itself would provide an internally consistent means of discovering the implications for PCLTF adequacy of each set of assumptions or input estimates.

A second objective for the design of the model was that it incorporate and reflect the uncertainty surrounding many aspects of the PCLTF adequacy question. Many facets of the analyses necessary to assess the adequacy of the PCLTF are subject to very large uncertainties. These uncertainties arise due to the scarcity of relevant data and, in some cases, an incomplete understanding of important physical processes. Because the potential uncertainties are so large, their inclusion and, where possible, their quantification, were important design considerations for the PCLTF Model.

Finally, the design of the model must allow for the incorporation of relevant new data and analyses that will become available over time. From the outset, it was recognized that a substantial research effort could be devoted to each of a large number of critical model components. Much of this research is currently ongoing or anticipated in support of other RCRA regulatory analyses. Consequently, a model design was required that would facilitate enhancement and revision. In this manner, the PCLTF Model could be kept up-to-date with the most recent EPA research and analysis results.

2.2 TYPE OF MODEL CHOSEN

To attain the objectives described in the previous section, a model was chosen and designed with the following major characteristics:

- a large set of options is provided for users to specify various assumptions and inputs;
- the Model operates as a stochastic simulation; i.e., key aspects of the Model are simulated using probability distributions; and
- the Model is structured into independent segments, which simplifies revisions and enhancements.

An easy-to-use set of options enables the Model user to reflect assumptions regarding Fund policies, RCRA regulatory policies, disposal facility characteristics, costs, release rates, and numerous other factors. The Model can easily produce estimates of PCLTF adequacy for a wide variety of combinations of assumptions and inputs. This ability helps maintain the neutrality of the Model as an analytic tool because different estimates of the adequacy of the PCLTF should be traceable to specific assumptions regarding various factors influencing Fund expenditures. Appendix D presents the full set of options available to the user for choosing input parameters.

The Model was developed as a stochastic simulation in order to reflect the large uncertainties surrounding various aspects of the analysis. The PCLTF Model is a stochastic or probabilistic model (often referred to as a "Monte Carlo" model) which is based on principles of probability and statistics. The Model produces output in the form of a distribution of potential outcomes. The distribution represents the combination of the various uncertainties in all the input factors, and can be interpreted by using standard statistical methods. Consequently, rather than provide a point estimate of the Fund balance such as an expected value or average, the Model produces a range of possible Fund balances. The distribution is created by performing a series of independent repetitions within a single Model run. Each repetition, called an iteration, performs an entire analysis of the PCLTF. The results of the iterations form the distribution of outcomes for a single Model run.[1]

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[1] The choice of the number of iterations to perform in a single Model run depends on the statistical properties of its results as well as the resources available for computer use. The statistical properties of the Model results are discussed in Appendix C.

The importance of being able to reflect the uncertainties associated with future PCLTF adequacy cannot be overemphasized. The uncertainties inherent in current estimates of many important factors (such as future rates of hazardous waste disposal, legal regimes in various states, costs of hazardous waste treatment and disposal, corrective action costs, etc.) and the probabilistic nature of various physical phenomena make single-value estimates very misleading. Additionally, the complexity of the relationships among the numerous factors (each of which is somewhat uncertain) militates against a purely analytic approach for providing a realistic assessment of future Fund expenditures and revenues.[2] Therefore, the stochastic simulation approach used in the design and implementation of the PCLTF Model is an important characteristic which adds considerably to the value and reliability of its results.

Finally, to facilitate the Model enhancement and revision, it has been given a highly structured form. The Model is comprised of a large number of semi-independent segments, with each segment having a particular purpose.[3] If one segment requires revision (e.g., a new approach becomes available for estimating the costs of responding to a release), the remainder of the Model may remain unchanged. This ability is particularly valuable because considerable research and analysis on topics relating to PCLTF adequacy are currently being undertaken in support of EPA's RCRA regulatory process. Consequently, the value of the Model is enhanced by its ability to be updated in a reasonable amount of time to reflect the most current Agency data and analyses.

2.3 FACTORS INCLUDED IN THE MODEL

This section provides an overview of those elements of the hazardous waste land disposal situation that are considered in the PCLTF Model analysis. The information is presented in a non-technical manner, although a general familiarity with current EPA RCRA requirements is assumed. For more detailed descriptions of the Model data and methods, the interested reader is referred to Appendices A and B (Volume III).

To organize the presentation of this complex and interrelated material, the factors included in the Model are divided into two types: Basic Units and relationships among Basic Units. Exhibit 2-1 displays a simplified representation of these two types of Model factors. The Basic Units (represented in the exhibit with rectangular boxes) include:

- Facility Population;
- Facility-Level Characterization;

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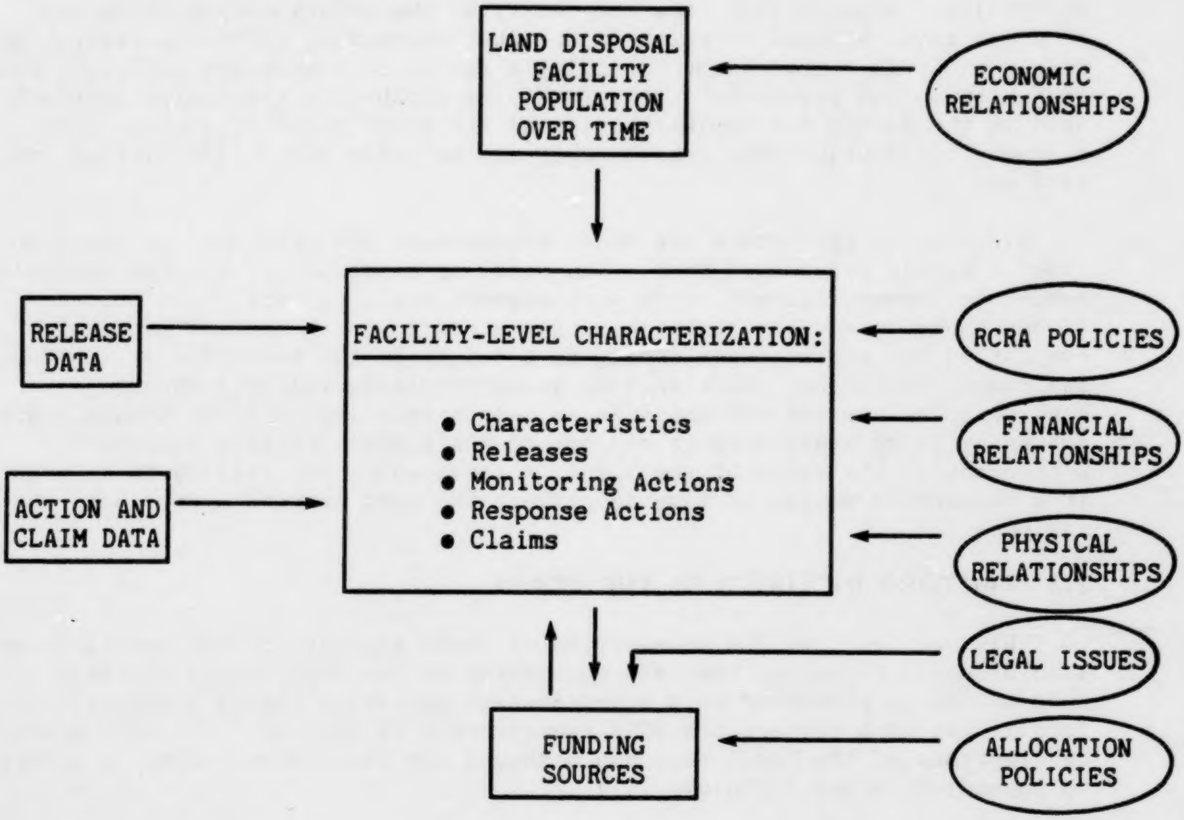
[2] An analytic approach would involve representing all the factors influencing the Fund's balance in a series of equations, and solving these equations for an expression equal to the Fund balance over time. While conceptually possible, this approach is not feasible on a practical level.

[3] Appendix C lists the Model segments and their purposes.

EXHIBIT 2-1

SIMPLIFIED REPRESENTATION OF THE PCLTF SIMULATION MODEL ANALYSIS[1]


LAND DISPOSAL FACILITY POPULATION OVER TIME
ECONOMIC RELATIONSHIPS
RELEASE DATA
FACILITY-LEVEL CHARACTERIZATION:
• Characteristics
• Releases
• Monitoring Actions
• Response Actions
• Claims
RCRA POLICIES
ACTION AND CLAIM DATA
FINANCIAL RELATIONSHIPS
PHYSICAL RELATIONSHIPS
LEGAL ISSUES
FUNDING SOURCES
ALLOCATION POLICIES

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[1] Rectangles display Basic Model Units. Ovals display the relationships among the Basic Model Units.

- Release Data;
- Action and Claim Data; and
- Funding Sources.

The values estimated for each of these Basic Units are influenced by the relationships among them (represented by ovals). These include:

- Economic Relationships;
- RCRA Policies;
- Financial Relationships;
- Physical Relationships;
- Legal Issues; and
- Allocation Policies.

As displayed in Exhibit 2-1, the PCLTF Model analysis proceeds as follows:

- The estimate of the population of land disposal facilities over time is based on economic relationships describing the supply of and demand for the land disposal of hazardous waste.
- For each facility in the facility population, a facility-level characterization is performed to estimate a series of characteristics (such as facility size and design). Based on these characteristics and the release data, the facility's potential releases are estimated.
- The estimated releases at a facility are an important driving influence on the facility-level characterization. In conjunction with RCRA policies and physical relationships, the estimated releases lead to monitoring actions, response actions, and claims. The costs of these actions and claims are estimated using the actual and claim data.
- The viability of the firm that owns the facility is dependent on the financial relationships among the firm's net worth, total assets, and expenditures for monitoring and response actions and claims. A firm's bankruptcy will lead to the closing of its operating facilities and the allocation of incurred costs to other funding sources.
- The costs of the actions and claims estimated at the facility level are allocated to the available funding sources according to specified allocation policies. The PCLTF is one of the potential funding sources available to cover costs that arise at the facility level. Various legal issues regarding the validity of third-party claims also play a role.

- An important feedback between funding sources and the facility-level characterization exists. If no funding source is available for a monitoring or response action, then the action is not taken. This feedback is important because a response action can prevent additional releases from occurring at a facility. Consequently, not having a funding source for certain actions may lead to additional numbers of releases.

The following two subsections describe the Basic Units and relationships included in the PCLTF Model. These sections are organized according to Exhibit 2-1.

2.3.1 Basic Model Units

2.3.1.1 Facility Population

The population of land disposal facilities considered in the PCLTF Simulation Model includes those facilities with the following land disposal processes:

- surface impoundments (storage, treatment, and disposal);
- landfills;
- land treatment; and
- injection wells.

An individual facility may employ one or more of these four processes. Facilities that handle hazardous waste but do not employ at least one of these processes are not considered.

The initial facility population (i.e., the facility population as of October 1, 1983, which is the beginning of year 1 of the PCLTF Model) is estimated using the most recent data describing interim status facilities:

- Part A Permit Application Data (1979-1980), which identify approximately 2,600 land disposal facilities;
- Telephone Verification Survey Data (1982) for approximately 1,170 of the 2,600 facilities identified in the Part A data; and
- National Mail Survey of RCRA-Regulated Hazardous Waste Handlers Data (1983), which provide the best estimates of the current aggregate facility population and additional detailed information on a small number of land disposal facilities.

Each of these data sources has strengths and weaknesses. No one source provides a fully comprehensive and verified listing of facilities that currently operate one or more of the land disposal processes analyzed in the Model. Therefore, the three sources were combined to form a data base from which the current facility population is estimated.

To reflect the current uncertainty in the true size of the facility population, the population is estimated probabilistically. This means that the number of existing interim status facilities simulated in each iteration of a Model run will vary. Because this variance may influence the PCLTF balance, the Model results reflect the uncertainty surrounding the size of the facility population.

The Part A Permit Application data form the pool of facilities from which the current facility population is estimated. Each facility in this large set (2,600) can potentially be simulated as an existing facility. The following procedure is performed for each facility listed in the Part A Data:

- If Telephone Verification Survey (TVS) data on the facility are not available (as is the case for over 1,400 facilities), then a TVS response for the facility identifying the disposal processes present is simulated using an estimated relationship between the Part A Data and TVS data. This relationship was estimated based on the 1,170 facilities for which both Part A and TVS data are available.
- The facility's TVS data (simulated or actual) are adjusted based on an estimated relationship between the TVS data and the Mail Survey results.
- The adjusted TVS data identify whether the facility is simulated to have one or more of the disposal processes included in the Model. If none of the disposal processes is simulated to exist at the facility, then the facility is dropped (for that iteration of the Model run). Otherwise, the facility becomes part of the existing facility population.

Because the adjustments and simulations in this process are based on probabilities, the simulated number of facilities (generated with the use of pseudo-random numbers) will vary. The expected value (i.e., the average) of the number of facilities and processes in the existing facility population is as follows:

- 769 surface impoundments;
- 198 landfills;
- 68 land treatment processes;
- 90 injections wells; and
- 980 facilities using one or more of the above processes.

These estimates agree closely with preliminary estimates recently published by EPA.[4]

New facilities are added to the Model's facility population over time as additional capacity is expected to be required to meet the demand for land disposal of hazardous waste. The future demand for hazardous waste land disposal is very uncertain. Proposals are currently being considered to ban or restrict the land disposal of hazardous waste in the near future. Whether these proposals are enacted will influence the future demand for land disposal, and consequently, the estimate of the size of the future population.

The Model is capable of assessing the implications of a variety of future land disposal scenarios. Of note is the fact that estimates of potential PCLTF expenditures over the next 100 years are not sensitive to assumptions regarding the number of new facilities created over the next 100 years.[5] This is because within this time frame, PCLTF expenditures are driven almost exclusively by the costs that arise at existing facilities.

2.3.1.2 Facility-Level Characterization

Each facility in the facility population is characterized in detail within the Model. Because detailed facility-specific data are not available for most facilities, the values for the characteristics are simulated. These simulations are based on descriptors of the distribution of facility characteristics within the facility population. For example, based on the 44 landfill responses to the Mail Survey, the distribution of landfill size (in acres) in the existing facility population can be estimated. This distribution is used to simulate the sizes of existing landfills within the Model. The size distribution of landfills simulated to open in the future may, of course, differ from the distribution for existing landfills. Consequently, a hypothetical size distribution for new landfills is required, which cannot (by definition) be based on actual observations of new landfill sizes.

It is important to differentiate between the facility-level characterization discussed here and the performance of facility-specific analyses. An alternative to simulating facility characteristics (as is currently performed in the Model) is to collect facility-specific data for all facilities. Such data could be used to analyze each facility and produce facility-specific estimates of future facility performance.

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[4] See: "National Survey of Hazardous Waste Generators and Treatment, Storage and Disposal Facilities Regulated Under RCRA in 1981: Preliminary Highlights of Findings," U.S. Environmental Protection Agency, August 30, 1983.

[5] It should be noted, however, that if the PCLTF funding source remains a waste-end tax, then potential future PCLTF tax revenues are very sensitive to the future land disposal scenario adopted.

Because of the time and resource requirements of collecting site-specific information, these data were not obtained for this analysis. Consequently, although data on actual facilities are utilized in the Model, the Model results are not site-specific.[6] The aggregate performance across all the facilities is, however, respresentative of the overall future performance of land disposal facilities. Therefore, although site-specific facility performance is not evaluated, the analysis is appropriate for examining the adequacy of the PCLTF and other questions.

The characteristics simulated at the facility level can be divided into two types: milestones and attributes. Milestones are activities that every facility must perform at some point in time. For example, every facility must eventually close (i.e., cease accepting hazardous waste for land disposal). Milestones are simulated at the facility level by estimating when they will occur. Attributes, on the other hand, describe the facility at a given point in time. For example, the size of a landfill is a facility attribute. The size is simulated by estimating a particular value, e.g., two acres.

The milestones, and the bases upon which they are simulated in the Model at the facility level, are the following:

- Begin Handling Hazardous Waste for Land Disposal: based on Telephone Verification Survey and Part A data identifying when existing facilities began operation. New facilities are simulated to begin operation as required to meet the demand for land disposal.

- Apply for a Final RCRA Permit: based on the assumed rate at which EPA will require and review permits at existing facilities. New facilities begin operation with permits.

- Cease Accepting Hazardous Waste for Land Disposal: based on an estimated distribution of facility life developed from 174 responses to the Mail Survey. The simulated facility lifetime is added to the year in which land disposal is simulated to have begun in order to estimate the time of facility closure. This milestone defines the beginning of the post-closure period. Very small facilities may excavate and decontaminate their land disposal process at this time, thereby avoiding any post-closure requirements.

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[6] The limitation on the ability to perform site-specific analyses is primarily caused by the lack of detailed site-specific data. However, the methods used to assess future facility performance can be used with most of the potential site-specific data, thereby providing site-specific estimates. In some situations, site-specific data may fall outside the range of allowable values that were used as the basis of the methods for evaluating site performance. In these cases, site-specific estimates would not be possible.

- Assess Eligibility for PCLTF Coverage: five years after each (permitted) facility ceases accepting hazardous waste for land disposal, a determination is made regarding PCLTF coverage. The test used to determine eligibility is described below in section 2.3.2.4, Allocation Policies. Facilities without final RCRA permits do not have an opportunity to qualify for Fund coverage.

- Owner/Operator Stops Performing Routine Post-Closure Monitoring and Care: based on an assessment of the adequacy of the owner/operator's (O/O's) financial assurance for post-closure care. By regulation, the O/O is responsible for 30 years of post-closure care. However, the O/O may, in some cases, stop performing this care before this time due to inadequate financial resources.

- End of the Post-Closure Care Period: the owner/operator is responsible for the routine monitoring and care of the facility for 30 years following closure.[7] The expiration of this period represents a change in O/O responsibility, and consequently influences cost allocation.

- Termination of All Business Activity by the Owner/Operator: the owner/operator may terminate all business activity during the operation or following closure of one or more of its facilities. For example, the O/O may be forced into bankruptcy by large corrective action costs or by unrelated factors. The timing of the O/O's business termination is simulated based on: (1) average national business termination rates (to account for causes of business termination not reflected in the Model); and (2) the relationship between the costs allocated to the O/O and the O/O's simulated financial strength. If an O/O terminates business during the facility's operation, then the facility is forced to cease accepting wastes for disposal.

The importance of these milestones is that they identify points in time during a facility's life at which important determinations or decisions are made. In particular, the timing of these milestones will influence the allocation of costs among potential funding sources (i.e., PCLTF, state funds, the Superfund, and the owner/operator). By simulating these key decision points, the Model analysis can represent the dynamic aspects of facilities' life cycles.

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[7] This time period may be adjusted on a case-by-case basis. All facilities are initially assigned a 30-year post-closure period. However, in cases where a corrective action is ongoing at the end of the 30-year period, the period is extended until the corrective action is completed.

The attributes simulated at the facility level are displayed in Exhibit 2-2. Also depicted are the values each of the attributes can have and the bases for the simulation of facility-level estimates. For example, the facility location is defined in terms of the state, county, groundwater region, and hazardous waste market region in which the facility is simulated to be. The simulation of the location is based on the observed distribution of existing facilities throughout the country.

Some simulated attributes form the basis for simulating other attributes. For example, facility location and process design are bases for simulating potential releases. Further, potential releases form the basis (along with monitoring action) for simulating detected releases. Detected releases are important for simulating the facility's permit status, PCLTF eligibility, and actions (monitoring and response) that must be taken. Clearly, the attributes simulated at the facility level are highly interrelated, and many interrelationships can be identified from Exhibit 2-2.[8]

Exhibit 2-2 also provides a sense of the "level of resolution" (i.e., degree of detail) of the Model analysis. The level of resolution of a model is often a controlling factor in its applicability to various issues. For example, the status of monitoring and response action is modeled at every simulated facility. The year the action began, the cost of the action, and the expected duration of the action are all maintained at the facility level. Consequently, the simulation of these values can depend on other facility-level characteristics and can influence other facility-level values. Therefore, the Model could be used to assess various RCRA action policies which define those actions that must be taken at facilities based on other facility characteristics.

The analysis of attributes could have been more detailed or less detailed. For example, the status of monitoring and response actions could be simulated at each disposal process (e.g., surface impoundment) at each facility. Modeling portions of disposal processes, such as landfill cells, would be even more specific. On the other hand, an example of less detail would be performing the analysis on groups of facilities. In choosing the level of detail for various aspects of the PCLTF Simulation Model, the need for resolution was balanced against the availability of detailed data and the costs of increased complexity and increased computer requirements. In general, all important factors influencing PCLTF coverage and costs have been resolved at the facility level.[9]

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[8] The relationships among the facility attributes are discussed below in section 2.3.2, Relationships Among the Basic Model Units.

[9] Appendix A describes in more detail the level of resolution adopted for each portion of the Model analysis.

EXHIBIT 2-2

ATTRIBUTES SIMULATED AT THE FACILITY LEVEL

Facility-level Attribute	Possible Values of Attribute	Basis for Simulation
Location	State; County; Groundwater region; Hazardous waste market region.	Distribution of existing facility locations. The distribution is modified for the purpose of simulating the locations of new facilities.
Permit status	Status to be determined; Final RCRA permit received; Final RCRA permit denied.	Permit policy; Detected releases.
Status of PCLTF eligibiity	Eligibility pending; Covered by PCLTF; Disqualified from PCLTF coverage.	Eligibility policy; Detected releases; Adequacy of financial assurance mechanism.
Disposal processes: size and design	Size in acres; Prototype design.[1]	Distribution of sizes and designs of existing facilities; Expected distributions for new facilities.
Financial assurance mechanism used	Corporate guarantee or financial ratios; Trust fund or insurance; Surety bond or letter of credit.	Distribution of financial assurance mechanisms used to date at existing facilities and used by firms in different net worth categories.
Firm which owns/ operates the facility	Net worth; Total assets; Number of facilities owned by firm; Government or privately owned firm; and Corporate tax rate for firm.	Distribution of financial data on firms owning land disposal facilities.

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[1] There are seven prototype designs incorporated into the Model. See Appendix B.

EXHIBIT 2-2 (continued)

ATTRIBUTES SIMULATED AT THE FACILITY LEVEL

Facility-level Attribute	Possible Values of Attribute	Basis for Simulation
Potential releases and associated distance to off-site detection location	Year after facility opening in which release is expected to occur; Distance to off-site detection location (in feet).	Release data; Facility location; Process design.
Population that may potentially become exposed to hazardous waste constituents due to an off-site release	Number of people.	Distribution of groundwater and surface water use near disposal facilities; Number of people drinking surface water and groundwater supplied near the facility location.
Detected releases	True or false for each release type.	Potential releases; Monitoring actions.
Status of monitoring and response actions	Year action began; Duration of action; Cost of action.	Detected releases; RCRA policy; Action data.
Status of claim	Cost of claims brought.	Detected releases; Location; Population which may potentially become exposed; Claim data.

2.3.1.3 Release Types Modeled

Seven release types are modeled based on the results of the Release Simulation Model developed as part of this project. In order to enhance computing efficiency, the Release Simulation Model was implemented separately. The same existing facility population which forms the basis for the PCLTF Simulation Model is used to drive the Release Simulation Model. The Release Simulation Model produces a series of release matrices which are subsequently used to simulate releases. The manner in which the release matrices are used is described in Appendix A. A detailed description of the Release Simulation Model is provided in Appendix B. This section describes the seven release types modeled.

A release from a hazardous waste disposal facility can be defined in a variety of ways. For example, any migration of waste outside of containment may be considered a release. Alternatively, a release may be achieved only if a certain critical rate of migration outside of containment is achieved. For this analysis, six releases are defined according to two characteristics: location and concentration. A seventh release type is defined in terms of location only. Release types 1 through 6, displayed in Exhibit 2-3, are formed by combinations of two locations and four concentrations. Each location and concentration is described below.

- **On-Site Monitoring Well**. The on-site monitoring well is the first location where the owner/operator may find evidence of a release into groundwater. For facilities designed with single liners, this location is assumed to be at the perimeter of the waste, and at the depth of the water table (i.e., the uppermost aquifer). For facilities with double-liner leak detection systems, this location is between the two liners. In discussions below, this location is referred to as "on-site."

- **Closest Off-site Potable Well or Naturally Occurring Body of Surface Water**. The off-site location where individuals (in the general population) could first become exposed to the hazardous waste migrating out of containment into groundwater is the potable well or body of surface water closest to the facility boundary. This location represents the point of first potential off-site exposure. The distance to this location, referred to here as "off-site," may vary considerably. Some facilities are within 1000 feet of groundwater wells used to supply drinking water; others are miles away from any potable well or surface water. Distributions describing the distances to this off-site location that are likely to be observed at land disposal

EXHIBIT 2-3

SIX RELEASE TYPES DEFINED IN TERMS OF LOCATION AND CONCENTRATION

Release Type	Location	Concentration
1	On-site Monitoring Well	Change in Indicator Parameters
2	On-site Monitoring Well	Detectable Concentration of Constituents
3	On-site Monitoring Well	Toxic Concentration of Constituents
4	Closest Off-site Potable Well or Naturally Occurring Body of Surface Water	Detectable through Taste and Odor
5	Closest Off-site Potable Well or Naturally Occurring Body of Surface Water	Detectable Concentration of Constituents
6	Closest Off-site Potable Well or Naturally Occurring Body of Surface Water	Toxic Concentration of Constituents

facilities were developed based on data from EPA's surface impoundment assessment survey.[10]

- **Change in Indicator Parameters.** The concentration of hazardous waste necessary to result in a change or increase in an indicator parameter in groundwater has been defined for each EPA waste code. The indicator parameters used are total organic carbon (TOC) and total dissolved solids (TDS).[11] The trigger TDS concentration is defined as 100 percent higher than the background TDS level.[12] The trigger concentration for TOC is defined as 10 ppm. (The TOC trigger does not vary throughout the country because most groundwater is very low in organic content.) This concentration is referred to here as "indicator parameter" or IP.

- **Detectable Concentration of Constituents.** The concentration of priority pollutant constituents that would lead to their identification during routine analysis is defined as the detectable concentration. For organic constituents, a 10 g/l detectable concentration is used based on the expected sensitivity of standard gas chromatography/mass spectrometry analysis techniques.[13] For inorganic constituents analyzed through indirectly-coupled plasma emission spectrometry, a detection limit of 20 g/l is used.[14]

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[10] Four separate distributions describing distances to the off-site location were developed for different parts of the 48 states analyzed in the Release Simulation Model. These distributions were estimated based on "Surface Impoundments and Their Effects on Groundwater Quality in the United States -- A Preliminary Survey," U.S. Environmental Protection Agency, 510/9-78-005, June 1978.

[11] The indicator parameters pH and total organic halides were not used in the Model. pH values were not simulated because there were very little data about the large influences of local soil conditions. Total organic halides are reflected in the use of TOC. TDS is used here as a substitute for conductivity, a commonly used and easily measured indicator parameter. The conductivities of wastes and naturally occurring bodies of water are not well catalogued. The TDS for each waste code was estimated using the solubility of its inorganic constituents. The TOC for each waste code was estimated as the sum of the carbon portions of each water-soluble organic constituent.

[12] Background TDS levels were identified for different areas of the country from "Surface Impoundments and Their Effects...," op. cit.

[13] The analysis techniques are described in "Guidelines Establishing Test Procedures for the Analysis of Pollutants; Proposed Regulations," Federal Register, December 3, 1979, pp. 69464-69575.

[14] Ibid.

- **Toxic Concentration of Constituents**. The toxic concentration is defined as the criteria level set for each of the 129 priority pollutants. If the pollutant is carcinogenic, this concentration implies an increased risk of cancer of one in one-million based on a 70-year period of exposure. Toxicity levels for non-priority pollutants are not defined.

- **Detectable through Taste and Odor**. Taste and odor threshold concentrations were identified for the hazardous waste constituents.[15] Taste thresholds were utilized where available. In cases when only odor threshold values for airborne concentrations were available, the concentrations in water needed to yield the airborne vapor concentration thresholds were identified.

The seventh release type is different from the six discussed above in that it does not have concentration as part of its definition. Release type 7 is defined as the overflow of contaminated leachate from the facility. This release occurs when the cap on a closed land disposal process allows more water to infiltrate into the facility than the facility can hold or pass through. This is often referred to as the "bathtub" effect because it resembles a bathtub overflowing. It could be caused by the excessive erosion of a clay cap or the failure of a synthetic membrane cap.

These seven release types were chosen in order to model the process of detecting and responding to releases. Each release type could be detected by one or more monitoring actions which may be undertaken at the facility. Additionally, the detection of each release type may lead to a particular set of monitoring actions, response actions, or claims.

For example, routine monitoring actions at the facility may lead to the discovery of release type 1, IP on site. As the result of this discovery, more detailed sampling and analysis may be required at the facility for a certain length of time. This more detailed analysis may be capable of detecting release type 2, detectable concentration on site, and release type 3, toxic concentration on site, if and where they occur. The discovery of one or both of these releases may lead to another set of actions, which may include a corrective action and/or monitoring off site, for example. If on-site monitoring fails to detect a release, the appearance of taste or odor at the off-site location could be the first indication of a release.

The relationships identifying how the detection of releases leads to monitoring and response actions were designed to reflect current RCRA regulations. These relationships are discussed more fully in Section 2.3.2, Relationships Among the Basic Model Units. It is important to note that the seven release types defined above form the lowest level of detail achievable in the Model's analysis of releases. Actions at the facility level are simulated as the result of the simulated detection of these releases. This level of detail enables the Model to be used for a variety of policy analyses. For example, the implications of alternative RCRA policies which identify the monitoring and response actions required in response to the detection of releases can be assessed. The next section describes the actions and claims simulated in the Model.

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[15] F.A. Fazzalori, Compilation of Odor and Taste Threshold Values Data, American Society for Testing Materials, 1978.

2.3.1.4 Actions and Claims

In response to the detection of releases, actions are undertaken and claims are brought by third parties. This section discusses each in turn.

Actions. Actions have the ability to detect releases that have already occurred, as well as the ability to prevent future releases from occurring. Both capital investment and operation and maintenance (O&M) expenditures are required when an action is undertaken.[16] The O&M expenditures (modeled on an annual basis) last for the duration of the action.

Actions can be divided into three types: monitoring actions, response actions, and post-closure care. Monitoring actions can only detect releases that occur. The five possible monitoring actions and the releases which they can detect are as follows:

- **Routine Monitoring for Indicator Parameters at the On-Site Monitoring Well** can detect release type 1, indicator parameters on site. This monitoring action is analogous to detection monitoring.[17]

- **Monitoring for Hazardous Waste Constituents at the On-Site Monitoring Well** can detect release type 1, release type 2, detectable concentration of constituents on site, and release type 3, toxic concentration of constituents on site. This monitoring action is analogous to compliance monitoring.[18]

- **Plume Delineation and Tracking On Site** is an action that is not simulated separately in the current runs of the Model; instead, it is included as a part of fluid removal and treatment, as described below. The Model does, however, allow the separate simulation of plume delineation. When this option is used, plume delineation and tracking on site can detect release types 1, 2, and 3. In addition, this detailed tracking program can provide information identifying whether the plume of concern has already migrated off site. If the plume has not yet gone off site, this monitoring action can also identify whether it is likely to go off site in the future. Plume delineation and tracking on site is required when an on-site corrective action is performed. However, it may be defined as a separate action so that alternative policies defining when this action should be undertaken can be assessed.[19]

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[16] Capital expenditures are constrained to be performed no more than once for each action at each facility.

[17] Detection monitoring is required at land disposal facilities. See 40 CFR 264, subpart F, Ground-Water Protection: Detection Monitoring Program.

[18] Compliance monitoring is required at land disposal facilities when detection monitoring indicates a release has occurred. See 40 CFR 264, subpart F, Ground-Water Protection: Compliance Monitoring Program.

- **Monitoring for Hazardous Waste Constituents Off Site** can detect release type 5, detectable concentration of constituents off site, and release type 6, toxic concentration of constituents off site. This monitoring action is analogous to on-site constituent monitoring, but takes place at an off-site location. It may be undertaken as a result of the detection of an on-site release or due to the appearance of taste and odor off site (release type 4).

- **Plume Delineation and Tracking Off Site** is not modeled as a separate action in the current runs of the Model; rather, it is included in off-site fluid removal and treatment (described below). As with on-site plume delineation, however, the Model permits the user to simulate off-site plume delineation as a separate monitoring action. Plume delineation and tracking off site can detect release types 5 and 6. In addition, if release type 6 has not yet occurred, this action can identify whether it is likely to occur in the future. The likelihood of concentrations reaching toxic levels (release type 6) can be used in the Model as a basis for simulating whether certain response actions should be undertaken.

If any of the five monitoring actions are being performed, then release type 7, the "bathtub" effect, may be observed (if it occurs) and consequently, by definition, detected.

Each of the monitoring actions described above must be performed for certain lengths of time. For example, once monitoring for constituents on site has begun (i.e., compliance monitoring), it must be performed for a maximum of 30 years or the facility's operating life. The durations and costs of each monitoring action are described more fully in Appendix A.

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[19] For example, a policy of requiring plume delineation prior to making a determination on the need for fluid removal can be modeled. The information on the potential for off-site migration of the plume may be utilized in the decision regarding the need for fluid removal.

Three response actions are performed to clean up releases that have occurred and to prevent future releases. Each action has a required duration. If the full duration is performed, then the response action is fully effective in cleaning up and preventing its relevant releases. If, however, a response action is stopped prematurely (e.g., due to a lack of funding), then the action may be less than fully effective.[20]

The three response actions and the releases they influence are as follows:

- **Cap Repair** will prevent the occurrence of release type 7.
- **Fluid Removal and Treatment On Site** will prevent the occurrence of release types 1 through 6 if they have not already occurred. Additionally, this response action cleans up the groundwater contaminated through release types 1, 2 and 3. In the current runs of the Model, this action includes necessary plume delineation actions and is analogous to a corrective action. Because source removal is not currently required by regulation, the duration of this action is essentially infinite. Were it to be stopped, plume growth would immediately resume.[21]
- **Fluid Removal and Treatment Off Site** will prevent the occurrence of release types 4, 5 and 6 if they have not yet occurred. This response action includes plume delineation and cleans up the contaminated groundwater off site. As with fluid removal and treatment on site, its duration is essentially infinite.

Post-Closure Care refers to those routine activities undertaken after the facility ceases accepting waste for land disposal and is closed. The major activities comprising post-closure care include:

- site security, including maintaining a fence;
- maintaining the cap; and
- leachate collection and treatment.

The costs and performance of these routine activities are not influenced in the Model by the initiation of other actions.

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[20] The effectiveness of partially-completed response actions is modeled probabilistically. If a release is not fully prevented, it may also be delayed. A set of physical relationships is used to model the effectiveness of releases.

[21] Corrective action is required at land disposal facilities when compliance monitoring demonstrates certain levels of groundwater contamination. See 40 CFR 264 subpart F, Ground-Water Protection: Corrective Action Program.

Claims. Claims are brought by third parties who believe they have been harmed by an off-site release. The four claim types are:

- **Personal Injury**. Medical costs, lost time due to disability, lost time due to premature death, and medical monitoring costs comprise personal injury claims.
- **Real Property**. Real property claims reflect a reduction in the value of housing and farmland near the location of the off-site release.[22]
- **Economic Loss**. The capital cost of replacing a contaminated source of drinking water is used to approximate economic loss claims.[23] This claim is only calculated where the contaminated source is simulated to be used for drinking.
- **Natural Resource Damage Claims**. The cost of restoring small areas of contaminated surface water, the value of lost recreation for one year, and the commercial value of potential fish kills comprise the estimate of natural resource damage.

These claim types are considerably broader and more inclusive than the claims currently covered by the Superfund. This broader coverage is due to the fact that the PCLTF covers liabilities under CERCLA and any other state or federal law.

Of particular note is that the simulation of personal injury claims is not based on an estimate of the number of people expected to suffer from adverse health effects as the result of exposure to hazardous waste constituents. The incremental increase in the incidence of certain diseases due to exposures to the types of releases simulated here is not expected to form the majority of potential personal injury claims. Instead, much larger costs will come from two different groups:

- individuals who suffer from conditions that they would have had even if the release had not occurred, but for which a causal link to the release cannot be proved or disproved; and
- individuals who do not exhibit signs of adverse health effects, but who feel themselves to be at an increased risk.

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[22] Property values at the county level were obtained from U.S. Bureau of the Census, County and City Data Book, 1977; these data are adjusted to 1982 based on changes in the Consumer Price Index between 1977 and 1982.

[23] The costs of alternative water supplies were obtained from U.S. Environmental Protection Agency, Technologies and Costs for the Removal of Fluoride from Potable Water Supplies, Final Draft, July 1, 1983, pp. 58-78.

The first group is referred to as those with the "background incidence" of the types of diseases and conditions believed to be related to exposures to toxic substances. Because the individuals with the background incidence cannot be distinguished from those with the incremental incidence (i.e., those whose condition was caused by the release), the individuals with the background incidence are potential claimants. Because the background incidence is much larger than the incremental incidence, the magnitude of the medical cost and lost time components of personal injury claims are modeled using the background rates of incidence. In this manner, the need to estimate incremental incidence is avoided.

The group of individuals who believe themselves to be at increased risk may claim for the costs of medical monitoring (i.e., routine checkups to test for the emergence of diseases or conditions potentially caused by their previous exposure). Because this group of individuals can be very large, the medical monitoring cost component is a significant portion of the simulated personal injury claims. Medical monitoring costs are estimated at $160 per person per year (1982 dollars).

It should also be noted that the site-specific nature of the likely extent of natural resource damage, and the lack of detailed data on key site-specific variables prevented the full quantification of these potential claims. Of the four claim types modeled, natural resource damage claims are the most incomplete in their characterization.

2.3.1.5 Funding Sources

The costs of actions and claims must be allocated to one of four potential funding sources: PCLTF, state funds, Superfund, and owners/operators. In the Model, if no funding source is available for an action, then the action is not taken. This point is particularly important because if, for example, monitoring actions are not undertaken, off-site releases may occur which otherwise would have been prevented. If no funding source is available for a claim, then the claimant is not compensated.

In order for a cost to be allocated to the PCLTF, the following two conditions must be met:[24]

- the facility at which the cost arises must be qualified for PCLTF coverage; and
- the cost must be of a type which the Fund covers.

The ability of state funds to cover costs is simulated using a series of representative state coverage regimes. Each state is probabilistically assigned one of the regimes which defines whether the state has a fund and the types of costs the state fund will cover. If state-covered costs arise at facilities within the state, the costs may be allocated to the state fund.

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[24] How these two conditions are modeled is described below in the section on Allocation Policies.

States are also simulated to cover a portion of Superfund-initiated actions (10 percent of costs at privately-owned facilities, 50 percent of costs at state and municipally owned facilities).

The owner/operator of a facility may also cover costs that arise. For the owner/operator to cover costs, one of the following two conditions must be met:

- the owner/operator has an active financial assurance mechanism (such as insurance or a trust fund) dedicated to covering the type of cost being allocated; and
- the owner/operator is still in business (even if the facility is closed) and consequently pays the cost of the action or claim.

It should be noted that financial assurance is currently required only for routine monitoring and care during the post-closure period. Consequently, most costs (e.g., corrective action costs) would not be covered by a financial assurance mechanism.[25]

Also of note is that the allocation of costs to owner/operator can force them into bankruptcy. If the cost of an action is initially allocated to an owner/operator who subsequently terminates business, the cost is reallocated to one of the other funding sources. If neither of the other funding sources covers the cost of the action, then the action is stopped.

Although hazardous waste generators may be potentially liable for costs arising at land disposal facilities, they are not included in the model as a funding source at this time. The importance of generators as a funding source depends, in part, on the interpretation of the transfer of liability to the PCLTF and the policies of cost recovery undertaken by EPA. Insofar as EPA is able to recover PCLTF expenditures from generators, the PCLTF balances may be underestimated by the Model.

2.3.2 Relationships Among the Basic Model Units

The relationships among the Basic Model Units described in the previous section can be divided into the six parts displayed in Exhibit 2-1 (see page 2-4). Each set of relationships is described below.

2.3.2.1 Economic Relationships

Several Model Units are linked together by the laws of supply and demand. These links are expressed within a series of economic relationships which defines how simulated quantities influence one another. Proper identification and specification of these various links are necessary for the Model's internal consistency.

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[25] Section 108(b) of CERCLA authorizes the President to promulgate requirements that facilities establish and maintain evidence of financial responsibility consistent with the risks they pose. Alternative assumptions regarding these requirements can be modeled to help identify their importance and usefulness as a funding source.

The most important economic relationship in the Model is between the demand for land disposal and the simulated facility population. The demand for land disposal is divided into four regional markets. The Model ensures that there is sufficient disposal capacity in each market region to meet demand by adding new disposal capacity as existing facilities close. New disposal capacity is created by adding new facilities to the facility population.

The demand for land disposal is driven by the rate of growth of industrial output, and by changes in the real prices of land disposal and substitutes for land disposal (e.g., incineration). If the real prices of land disposal and its substitutes remain fixed, then the demand for waste disposal would be expected to grow at the same rate as industrial output growth. As the real prices change, demand for waste disposal will change, and this change will influence the facility population.

Currently, there is considerable uncertainty regarding the future prices for land disposal and its substitutes; consequently, the future demand for land disposal is also very uncertain. The Model is structured to allow the use of a wide variety of assumptions in this regard.

Despite the overall uncertainty regarding the future of land disposal, it is clear that future funding mechanisms for the PCLTF could influence the price of land disposed. If, for example, the PCLTF tax rate were increased substantially, it could reduce the future demand for land disposal by increasing its real price. In order for the Model to produce internally consistent results, this feedback between a PCLTF tax increase and the demand for land disposal must be incorporated. The links specified between price, demand, and the facility population enable the Model to simulate this important feedback.

2.3.2.2 RCRA Policies

RCRA policies are an important driving factor in the PCLTF Simulation Model. Most significantly, they influence the facility-level characterization discussed above. The two RCRA policies of particular importance in the analysis of the PCLTF are: (1) the process by which permits will be granted (or denied) at interim status facilities; and (2) the specification of those actions that must be undertaken at facilities in response to the detection of releases.

The Model has been developed to allow a wide variety of policy assumptions to be used. However, for the analyses presented in this report, a set of policies has been assembled which, in the opinion of EPA, is believed to reflect current Agency policy. The following discussion presents how the policies are defined for modeling purposes and how they form links among the Basic Model Units.

Permitting Policy. The permitting policy links the types of releases simulated to occur with the determination of whether (and when) an interim status facility receives a final RCRA permit.[26] This link is particularly important for assessing PCLTF adequacy because a final RCRA permit is a condition for Fund coverage. The permitting process may weed out high-risk facilities, thereby reducing Fund outlays. Consequently, the modeling of the permitting process must incorporate its potentially-selective nature.

The permitting policy is defined by four characteristics:

- the rate at which permit determinations (granted or denied) will be made;
- the "evidence" that must be presented by the facility;
- the decision rule used to make the permit decision; and
- the fraction of owner/operators who close their facility rather than get a permit.

The permitting rate is defined in terms of the number of years it will take EPA to request and evaluate permit applications from the population of interim status land disposal facilities. If it takes a long time for EPA to perform this task, facilities may be simulated to close prior to a permitting determination being made. Of note is that although EPA is attempting to request final permit application first from "problem" facilities, this aspect of the permitting process is not modeled.

The relevant evidence that must be presented by the facility in its permit application is information on the existence and extent of groundwater contamination at the facility. This information is modeled in terms of whether any of the seven release types has occurred and has been detected at the facility. The occurrence of the release types is simulated at the facility level as described above in the facility-level characterization.[27] Whether the release types are detected depends on the extent of site investigation required in the permit process.

At a minimum, the results of the facility's detection monitoring program (capable of detecting release type 1, change in indicator parameters on site) will be utilized in a facility's permit review. Consequently, the evidence supplied by this monitoring activity is modeled to be part of the permit decision process. In addition, the Agency could require a more extensive site assessment. Although not utilized in the simulations presented in this report, the ability to model a more detailed site assessment process has been developed.

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[26] All simulated new facilities are presumed to open with a final RCRA permit. Consequently, the permitting policy does not affect new facilities.

[27] Site-specific data on the existence of groundwater contamination are not available, and are therefore not utilized in the Model.

The permitting decision rule defines whether, based on the evidence presented, the facility is granted or denied a final RCRA permit. The rule can specify those releases (including combinations of releases) that result in a permit being denied. (In the simulations presented in this report, the permitting rule specifies that releases do not prohibit a facility from obtaining a final RCRA permit.) Of note are those factors not included in the Model's permitting decision rule, including: past or current violations of RCRA regulations, inability to demonstrate financial assurance, and waste-liner compatibility. Insofar as these and other factors play an important role in the denial of RCRA permits, the Model may overestimate the extent to which interim status facilities obtain permits, and consequently, underestimate the need for new land disposal capacity.

Instead of applying for a permit, some owners/operators will prefer to close their facility. For example, an owner/operator may decide to transport waste to another facility and close his facility instead of applying for a permit. This process is modeled by allowing a user-supplied fraction of existing facilities to close rather than obtain final permits. (Current simulations set this fraction at 25 percent.)

Action Policy. An action policy is constructed in the Model to identify those actions that must be undertaken in response to the detection of releases. The Model uses a set of action rules which reflects the current EPA policies regarding detection monitoring, compliance monitoring, corrective action, and post-closure care. However, the action rules are completely general. They can be used to identify when any of the possible monitoring and response actions are started (and stopped) as a function of when releases are detected.

2.3.2.3 Financial Relationships

Financial relationships are used to assess the viability of firms. Facilities are owned by firms which may incur costs for monitoring, corrective action, and claims at one or more of their land disposal facilities. These costs may force the firm to go bankrupt. Bankruptcy leads to the closing of all the firm's operating facilities and the elimination of the firm as a potential funding source. If an alternative funding source is not available to cover the costs for ongoing actions, then the actions are terminated. Consequently, the financial relationships are an important driving force in the Model because they determine the rate at which firms are not able to cover expenditures.

The viability of each firm is assessed annually. The likelihood of a firm going bankrupt depends on the monitoring, response, and claims expenditures currently being incurred by the firm and on the financial status of the firm. The likelihood is evaluated annually because there is an annual chance of bankruptcy due to the background failure rate and because the expenditures incurred by the firm may change each year due to the initiation or termination of actions at one or more of its facilities. All the factors that influence the likelihood of a firm going bankrupt are presented in Exhibit 2-4.

Given the firm's financial characteristics and its annual expenditures, a financial relationship is used to determine the likelihood that a firm will go bankrupt in the current model year.[28] Whether the firm goes bankrupt is simulated based on the background bankruptcy rate associated with the firm's net worth and the likelihood of expected net income exceeding the increases in costs associated with monitoring, response, and claims.

2.3.2.4 Allocation Policies

The Model's general framework allows the specification of a wide variety of allocation policies. The allocation policies identify the manner in which costs generated at the facility level are allocated to the possible funding sources (PCLTF, state funds, Superfund, and owner/operators). The policies are identified by a series of allocation rules which identify how each cost arising at the facility level is to be allocated in various situations. In addition, there are a set of rules which define how facilities may qualify for PCLTF coverage. The Fund qualification rules are a key component in cost allocation. Each of these rules is discussed below.

Allocation Rules. In performing the cost allocation, the allocation rules specify which of the funding sources may be used and the order in which they are used. The order is particularly important because if the funding source specified as first (e.g., the owner/operator) is able to pay the entire cost, then the second and third funding sources (e.g., PCLTF and state funds) would not be called on to cover the cost.

The rules are constructed so that the allocation of costs will depend on the following facility-level characteristics:

- where the facility is in its life cycle (e.g., operating, closed for less than 30 years, closed for more than 30 years);
- whether the facility is an existing or new facility;
- whether the facility has received a final RCRA permit; and
- whether the facility has qualified for PCLTF coverage (the facility's PCLTF eligibility may be pending, qualified, or unqualified).

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[28] See Appendix A for a detailed description of the procedure used to assess a firm's viability.

EXHIBIT 2-4

FACTORS INFLUENCING THE LIKELIHOOD OF FIRM BANKRUPTCY

Firm Characteristic	Role in Evaluation of Firm's Viability
Number of facilities owned by firm.	Estimation of monitoring, response, and claims expenditures incurred by firm at its facilities.
Firm's net worth.	Definition of the background rate of bankruptcy.
Total capital, O&M, and claims expenditures; and Federal corporate tax rate.	Estimation of firm's expected after tax expenditures for ongoing actions and claims at its facilities.
Firm's total assets.	Estimation of firm's expected after tax net income.
Firm's expected after tax net income and after tax expenditures for ongoing actions and claims.	Likelihood of bankruptcy failure associated with firm.

For example, a closed facility which has qualified for PCLTF coverage will have its costs allocated differently than a facility which is still in operation.

These rules are also the means by which the Model user identifies the costs that will be covered by the PCTLF. Because the allocation rules can differentiate among each of the different cost types, selected costs may be allocated to the PCLTF in various situations. For example, post-closure care costs at qualified facilities may be defined to be covered by the Fund only after the end of the post-closure period. In addition, because the rules define the order in which allocation takes place, the Fund coverage can be modeled as coming either before or after recovery from owners/operators, state funds, and Superfund.

Fund Qualification. One important facility characteristic driving the allocation of costs is whether the facility owner/operator has transferred his or her liability to the PCLTF. When this transfer of facility liability takes place, the facility is said to be qualified for Fund coverage, or "qualified." A facility which is denied Fund coverage is called "unqualified." Before a determination is made regarding a facility's ability to qualify for Fund coverage, the facility is said to have its qualification status pending.

A series of qualification rules is used to determine the qualification status of each facility over time. Both the timing[29] of the qualification determination and the bases for disqualifying a facility can be varied.

The facility-level characteristics that can influence the qualification determination are:

- whether releases have been detected;
- whether all necessary actions have been taken in response to the detected releases; and
- whether the owner/operators' required financial assurance has been adequate through the time of the determination.

Based on the simulated values of these facility-level characteristics, the facility may become qualified or be disqualified.

This structure for the qualification rule is somewhat limited because it does not incorporate other potential causes of facility disqualification, such as past violations of RCRA regulations. However, for the purposes of assessing PCLTF adequacy, it selectively weeds out high-risk facilities based on their past performance.

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[29] CERCLA defines the timing as not to exceed five years following closure.

2.3.2.5 Legal Validity of Claims

Legal issues arise when third parties make claims against owners/operators or the PCLTF. In order for a third-party claim to be legally valid, it must be recoverable under an applicable theory of law or state statute. Statutes and theories of law vary from state to state throughout the country, meaning that the legal validity of a claim will depend upon the statutes and established legal theories of the state in which the claim arises.

To model this phenomenon, a set of seven representative legal regimes was developed based on a review of existing state statutes and federal and state common law theories. These legal regimes form a link between claims simulated at the facility level and the allocation of these claims to the potential funding sources. Each legal regime defines the likelihoods that personal injury claims, real property claims, and economic loss claims have for being legally valid. Natural resource claims are always assumed to be legally valid because they are specifically identified in CERCLA as a liability of the owner/operator.

The seven legal regimes are probabilistically assigned to the states. As claims arise at facilities, they are evaluated under the legal regime assigned to the state in which they are located. The likelihoods of the claims being legally valid differ not only across the legal regimes, but also by claim type and release type.

Of note is that legal regimes do not evolve over time within the Model. An assessment of the legal regimes that exist today is used throughout the time horizon of the analysis. Because recent trends in the evolution of state statutes and legal theories appear to be in the direction of increasing the bases of recovery for the types of claims modeled here, the simulated legal validity of claims may be an underestimate of their future legal validity.

2.3.2.6 The Effect of Response Actions on Releases (Physical Relationships)

The final set of Model relationships describes physical phenomena at the facility level. These relationships primarily identify the influence that undertaking response actions has on the contaminated groundwater at the facility. For modeling purposes, this important relationship is defined as a feedback from response actions to releases.

As described above in the section on actions and claims, each response action has associated with it a set of releases which it is capable of cleaning up or preventing. If a response action is performed for its full duration, it is assumed to be fully successful in its cleanup and prevention of releases. However, a method was required to evaluate the effectiveness of response actions that are only partially completed.

The preferred approach for estimating this relationship would be to model the physical processes inherent in the response actions at the facility level. However, a simpler parametric approach was adopted. The effectiveness of response actions is assumed to be a function of the portion of the action completed. The greater the portion completed, the more likely the action is to be successful.

An improved understanding of response actions and their effects on current and future groundwater contamination is clearly desirable. For the purposes of this Model, however, the results are not sensitive to a wide range of relationships examined. This lack of sensitivity is due primarily to the fact that most response actions are simulated to be performed for their full duration. However, under alternative cost allocation policies, greater numbers of response actions could be left incomplete. In such situations, assumptions regarding these relationships could have more impact on the Model's results.

This chapter has presented a non-technical overview of the PCLTF Model. Greater detail on the topics covered is found in Appendices A and B in Volume III of this report. The following chapter discusses how the Model is used to assess PCLTF adequacy.

CHAPTER 3

HOW THE MODEL IS USED TO ASSESS PCLTF ADEQUACY

The PCLTF Simulation Model described in the previous chapter is a tool for analyzing RCRA-regulated land disposal facilities and their relation to the PCLTF. This chapter presents the concepts underlying the use and interpretation of the Model, and discusses the concept of PCLTF adequacy.

3.1 USE OF THE PCLTF SIMULATION MODEL

The PCLTF Simulation Model, like all models, is a simplified representation of a complex situation. The Model is constructed so that it represents, to the greatest extent possible, behavior in the real world. However, because the Model is a simplification, special care must be exercised in using it.

To use the Model to assess the future performance of the PCLTF, the following steps are performed:

- develop a set of assumptions and data describing the most likely future configuration of the PCLTF (often referred to as a "Base Case");
- investigate the sensitivity of the Model's results to the assumptions and data employed; and
- perform simulations of potential alternative configurations of the PCLTF.

The Base Case provides the best estimate of the likely future performance of the PCLTF. Consequently, careful consideration must be given to the choice of inputs used to define it. The Base Case also supplies a standard against which all subsequent Model runs can be compared. In this report, Simulation 1 presented in Chapter 4 can be thought of as a Base Case.

Once a Base Case is defined, the sensitivity of the results to the assumptions and data employed must be examined. Because the Model simulates a simplified world, it is important to identify the effects that the simplifications have on the results.

The sensitivity of the results to most factors can often be seen very readily. For example, if the costs of post-closure care are a very small portion of total PCLTF expenditures, then the estimates of the PCLTF balance over time would not be sensitive to data describing the magnitude of these costs. For those factors whose relationship to the Fund balance are more difficult to identify (e.g., the specification of the ability of owners/operators to cover costs without going bankrupt), model runs can be performed with alternative inputs. These analyses would be called sensitivity runs of the Model.

Finally, various Fund configurations can be assessed using alternative policy assumptions. These policy simulation runs differ from the Base Case by the way in which the Fund is assumed to be implemented. Unlike the sensitivity runs, the policy simulations are not primarily designed to assess how the Base Case results are affected by various assumptions. Instead, they are used to assess how alternative Fund configurations would perform over time.

The Model's ability to perform policy simulations makes it a valuable tool for enlightening the debate surrounding PCLTF implementation. Using the Model, the implications of a wide variety of Fund structures can be examined. The policy simulations may vary along a variety of dimensions, including: PCLTF qualification requirements, the types of costs covered by the PCLTF, and PCLTF funding. Such policy simulations are presented in Chapter 4.

Policy simulations can also be performed to analyze a variety of other questions. Some questions may be closely related to the PCLTF, such as identifying the likely magnitude of costs expected to arise at facilties not covered by the PCLTF. The Model provides estimates of all the non-PCLTF costs arising at land disposal facilities over time. Some of these costs, for example, may ultimately become the responsibility of the Hazardous Substance Response Fund (Superfund). The potential distribution of future costs between the PCLTF and the Superfund can be assessed.

Numerous other policies can be examined to various degrees with the Model. As described in Chapter 2, the Model incorporates most of the major factors influencing land disposal facilities. Therefore, the Model is a particularly valuable tool for assessing the overall implications of various policies on this population.

Particular care must be exercised, however, in the application of the Model to uses for which it is not intended. For example, the data that drive the Model are not sufficiently detailed to allow site-specific estimates of facility performance to be made. Instead, the Model is designed to evaluate a population of facilities. (If site-specific data were available, the Model could be used on a site-specific basis.)

Similarly, as mentioned above, the Model is a simplified representation of the complex world. In developing the Model, certain factors which are not important for the assessment of the PCLTF have been omitted. However, because these omitted factors may be very important for alternative analyses, a careful review of the Model's capabilities and assumptions is warranted before undertaking analyses which are clearly unrelated to the PCLTF. Chapter 2, Appendix A, and Appendix B of this report may form the basis for such a review.

3.2 INTERPRETATION OF THE MODEL RESULTS

The PCLTF Simulation Model is a stochastic (i.e., probability-based) model. This means that the results it produces are probability distributions. The ability to produce distributions differentiates the Model from other models that produce single values or point estimates.[1] This ability helps to make the Model a powerful tool, but demands an increased level of sophistication on the part of the user to interpret the results.

Before describing how the Model results are interpreted, several terms must be defined. A single run of the Model produces a set of results. The results for a run are driven by the inputs used to specify the run, and by the data and relationships built into the Model. Runs differ from one another in terms of the inputs used. The underlying Model data and relationships remain unchanged.

A single run is made up of numerous iterations, or sequential operations of the Model under the same set of inputs. During each iteration, the Model performs all the calculations necessary to estimate the PCLTF balance over time. The results from one iteration to the next will vary because they depend on events which occur probabilistically. The occurrence of the probabilistic events is modeled using random numbers.[2] These probabilistic events are the sole basis for differences among iterations within a single run.

The results of each iteration in a Model run are statistically independent and equally likely. Each iteration is analogous to a strictly controlled experiment, and the results of the numerous iterations can be combined into an estimate of the distribution of the PCLTF balances over time. Although the outcomes of the controlled experiments may vary, the variance may be attributed to random factors.

For example, a given Model run may be made up of 29 iterations. This means that for each of 100 years, the Model will estimate the PCLTF balance (and everything else as well) a total of 29 times; for example, there will be 29 estimates of the balance in year 25 (and in every other year of the run). The 29 estimates of the balance in year 25 can be described in terms of their distribution. The distribution can be graphed, and its nature summarized by various statistics.

The statistics used to summarize the estimated distributions provide the basis for interpreting the Model results. Consequently, the choice of statistics is important. Fortunately, standard statistical measures are available which identify the two most important aspects of the distributions: (1) their central tendency; and (2) their spread. To interpret the Model results, one must be familiar with the statistics used.

The central tendency of a distribution represents, as the name implies, its "middle" value. Two statistics describing the central tendency are used in the Model, the mean and the median.

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[1] Models that produce point estimates are often referred to as deterministic models.

[2] Appendix C describes the random number generator used.

The mean is the average value observed across the 29 iterations. As such, it is an estimate of the expected value of the distribution. For example, the mean PCLTF balance is reported for each year in a Model run. In interpreting the mean, one must realize that the reported quantity is itelf an estimate of the underlying true mean of the distribution. Consequently, there is uncertainty surrounding the estimate of the mean. This uncertainty is expressed as the standard error of the mean. The standard error indicates how the spread of the distribution influences the estimate of the mean.

The median of a distribution is also an indication of its central tendency. The median is the value for which there is a 50 percent chance of an observation falling either above or below it. The median is considered to be more "robust" than the mean because its value is not influenced by extreme values in the distribution.

The spread of the distributions is identified using the tenth and ninetieth percentiles of the observations. These quantities estimate the values below which 10 percent and 90 percent of the observations would be expected to fall, respectively. For example, if the estimated tenth percentile for the Fund balance in year 30 is $300 million, this means that given the uncertainties reflected in the Model, there is a 10 percent chance of the Fund being below this amount in this year.

The greater the number of iterations in a given Model run, the greater the confidence that the distributions generated and summarized as Model output resemble the actual distributions which would result from the Model assumptions and parameters. In other words, the larger the number of independent observations of the characteristics of a phenomenon, the better the characterization of the phenomenon, given the accuracy of the techniques used for measuring the attributes of the characteristics. Estimates can be improved by undertaking additional independent observations, but the accuracy of the estimates can never exceed the underlying accuracy of the measurement techniques. This analogy is consistent with the design philosophy incorporated in the Model. There is value in performing numerous iterations, but only up to a point. Of course, added iterations add to computer costs for running the Model.[3]

In interpreting the Model results, one must carefully consider which, if any, of the statistics described above are appropriate for addressing the question(s) at hand. For some applications, the characterization of the entire distribution may be important. Consequently, all the statistics discussed above may be relevant. For others, an estimate of a likely "worst case" may be all that is required, making the tenth percentile estimate the most important. Several observations regarding those statistics most relevant for assessing PCLTF adequacy are presented next.

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[3] Appendix C describes how the number of iterations performed influences the characterization of the Model results.

3.3 ASSESSING PCLTF ADEQUACY

Drawing conclusions regarding the adequacy of the PCLTF clearly requires subjective judgments regarding "how adequate is adequate." This section briefly presents how the Model results aid in the process of making these subjective judgments.

The question of adequacy begins with the identification of objectives for the Fund's performance. The main objective may be, for example, that the Fund be likely to have sufficient revenues to cover expenditures over the foreseeable future. Although this objective may appear straightforward, the use of the word "likely" opens up the objective to a variety of interpretations regarding "how likely." Different interpretations of "likely" require the use of different output statistics; for example:

- **Very likely**. If future revenues must be very likely to be sufficient to cover future expenditures, then the tenth percentile estimate of the Fund balance may be most relevant for assessing adequacy. In this case, there is only a 10 percent chance that the balance will fall below the tenth percentile. A less conservative percentile "safety line" would be the twenty-fifth percentile.

- **More likely than not**. If future revenues must be more likely than not to be sufficient to cover future expenditures, than the median estimate of the Fund balance may be most relevant.

In general, the Fund balance statistics one chooses to use will depend on one's inherent conservatism and one's sense of the robustness of the Model output.

There may, of course, be a variety of objectives for Fund performance. For example, one may not want the Fund to become extremely large. Also, it may be desirable to have a Fund which is stable, meaning a Fund which is not sensitive to expenditure shocks. Objectives may be related to factors other than Fund balance, such as the extent to which funds are available to undertake corrective actions at land disposal facilities.

The likelihood of the Fund attaining its various objectives can be assessed using the Model. In addition, as described above, various policy simulations can be performed to identify the Fund configurations that are most likely to attain the stated Fund performance objectives.

In using the Model to draw conclusions regarding PCLTF adequacy, one must always keep in mind that the Model is only a tool, presenting a simplified analysis of a very complex world. As such, the Model results are not answers, but merely indications of how the world is expected to behave under a given set of assumptions. Their value lies not only in the estimates of the PCLTF balance, but also in the insight they provide into the relative importance of the factors influencing Fund performance. The next chapter presents the results and important insights gained from the five simulations. Chapter 5 presents further analyses of Fund revenues under a variety of Fund management policies.

CHAPTER 4

SIMULATION RESULTS

This chapter first presents a detailed description of Simulation 1, which represents EPA's current view of the most likely set of policies to be embodied in the Fund. The policies and assumptions used are described, and the Model results are presented. Then, each of four additional policy simulation runs defined by EPA is presented separately. Each run is defined in terms of how it differs from Simulation 1, and emphasis is placed on how the results differ from the Simulation 1 results. Following the presentation of the simulation descriptions, brief sections summarize the Model results and compare the distribution of costs among potential funding sources. Finally, a conclusions section is presented.

4.1 SIMULATION 1

4.1.1 Definition of Simulation 1

For the purpose of defining this simulation, a set of inputs has been assembled which EPA believes best reflects the current PCLTF statute. (Appendix D displays all the inputs used in Simulation 1.) Clearly, numerous EPA policies regarding the implementation of the Fund must be anticipated. The assumptions used here do not necessarily reflect future Agency policies. Instead, this analysis and the Model upon which it is based form a tool which the Agency and Congress may find useful in their assessments of alternative PCLTF policies and legislation.

The following major assumptions are incorporated into this and all the other policy simulations:

- **Initial Facility Population.** The initial facility population incorporates all existing interim-status land disposal facilities with the following processes: surface impoundment (storage, treatment, and disposal); landfill; land treatment; and injection well. The size of the initial facility population is estimated using the most recent data on land-disposal facilities compiled by EPA; it is approximately 980 facilities nationwide.

- **Addition of New Facilities to the Facility Population.** New facilities are added to the facility population as additional land disposal capacity is required to meet the demand for land disposal. Additional capacity is required over time because existing facilities are simulated to close. The demand for land disposal is assumed to decrease by two percent per year for the next 50 years (beginning October 1, 1983), and then to remain constant (Simulation 2 varies this assumption).

- **Facility Characterization**. Existing facilities in the facility population are characterized according to the most recent population data obtained by EPA. New facilities are simulated to conform with the new land disposal regulations promulgated by EPA.[1] New facilities are assumed to have better locations than existing facilities (in terms of the likelihood of releases and potential exposure to contaminated groundwater).

- **RCRA Policy Regarding Facility Permits**. Final RCRA permits are assumed to be granted or denied to all existing facilities within the next five years. Any facility may be granted a permit, regardless of the evidence of releases that may have occurred. However, it is assumed that 25 percent of existing facilities will close rather than obtain final permits. This 25 percent is chosen randomly in each iteration. No other permitting requirements are used in this simulation.

- **RCRA Policies Regarding Monitoring and Response Actions**. All owner/operators are simulated to undertake detection monitoring and, when necessary, compliance monitoring as required by current land disposal regulations. In addition, monitoring outside the facility boundaries is simulated in the event that on-site monitoring reveals that a release has migrated off site (however, this monitoring is not paid for by owner/operators). Corrective action (both on site and, when necessary, off site) is simulated when the results of compliance monitoring indicate groundwater contamination (the owner/operator only pays for on-site cleanup).

- **Third-Party Claims**. Third-party claims are simulated in response to off-site releases only. The legal validity of third-party claims is simulated to reflect current state and federal statutory and common law.

A set of policies defining the manner in which the PCLTF will be implemented is also required. The PCLTF implementation policies are listed in Exhibit 4-1 and discussed below. These policies differ in the policy simulation runs. In Simulation 5, the PCLTF is omitted; thus, these policies are not applicable.

Qualification for PCLTF Coverage. In order for a land disposal facility to qualify for Fund coverage (i.e., transfer its liabilities to the Fund as outlined in CERCLA section 107(k)), it must meet the conditions listed in Exhibit 4-1. The final RCRA permit requirement and the five-year period of monitoring are CERCLA requirements. The demonstration of "no substantial likelihood" of migration off site, release, or risk to public health required by CERCLA is interpreted to mean that no release be detected prior to the end

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[1] 40 CFR 264.

EXHIBIT 4-I

PCLTF IMPLEMENTATION POLICIES[1]

- **Qualification for PCLTF Coverage**
  - -- Final RCRA permit received.
  - -- Qualification monitoring period of five years.
  - -- No releases detected prior to the end of the five-year qualification monitoring period.
  - -- Financial assurance for post-closure care remains active throughout the five-year qualification monitoring period.
- **Fund Coverage at Qualified Facilities**
  - -- All third-party claims.
  - -- Non-routine monitoring and response actions following the 30-year post-closure period.
  - -- Routine monitoring and care following the 30-year post-closure period.
- **Fund Revenues**
  - -- Tax of $2.13/dry-weight ton fixed in nominal dollars.
  - -- Fund ceiling of $200 million fixed in nominal dollars.
  - -- Fund earns 5.1 percent nominal interest on any positive Fund balance.

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[1] Not applicable to Simulation 5 which does not include the PCLTF.

of the five-year qualification monitoring period. This means that any release detected prior to this time (including during operation) would disqualify a facility from Fund coverage. Finally, the financial assurance requirement listed in Exhibit 4-1 is included to reflect the CERCLA provision requiring that the facility comply with all RCRA regulations which may affect the performance of the facility after closure (CERCLA section 107(k)(1)(A)).

Fund Coverage at Qualified Facilities. The PCLTF is authorized to cover the costs of monitoring, response, and claims established in CERCLA or any other state or federal law (CERCLA section 111(j)). Fund coverage includes all third-party claims immediately following the transfer of liability to the Fund. Based on EPA's interpretation of CERCLA, non-routine monitoring and response actions, and routine monitoring and care (including detection monitoring, compliance monitoring, and post-closure care such as leachate collection and security) are assumed to remain the responsibility of the owner/operator throughout the 30-year post-closure period. The Fund covers these costs only after the facility's post-closure period.

Fund Revenues. Fund revenues come from a tax of $2.13/dry-weight ton of disposed hazardous waste. This tax rate is fixed in nominal terms, as is the Fund ceiling of $200 million. The total amount of disposed waste is assumed to decrease at a rate of approximately 2 percent per year. Therefore, the total potential annual tax revenue also decreases at this rate. The Fund may also obtain revenues by investing the positive Fund balance in federal securities. A nominal rate of return of 5.1 percent per year is used.

In addition to these PCLTF policies, a Superfund coverage policy was specified. At facilities that do not qualify for the PCLTF and when the owner/operator or a financial assurance mechanism is unavailable, the Superfund is simulated to cover certain costs. These costs include on- and off-site non-routine response actions and natural resource damages.

4.1.2 Simulation I Results

The results of Simulation 1 are presented in a series of graphs and tables bound separately for the reader's convenience in Volume II of this report. These results, and the policy simulation results described below, are based on runs of 29 iterations (i.e., each run is composed of 29 separate estimates of each quantity of interest). For example, there are 29 estimates of the Fund balance in year 35 (and in every other year for which the Model is run). These 29 estimates form a distribution reflecting the combination of the uncertainties surrounding the various factors influencing the PCLTF. In the results presented below, these distributions are described in terms of the following statistics:

- **Minimum**: the smallest of the 29 values observed.
- **Tenth Percentile**: the value below which 10 percent of the observations fall. For 29 observations, the third-smallest observation is the tenth percentile.

- **Median**: the value for which there is a 50 percent chance of an observation falling either above or below it. For 29 observations, the 15th-ranked observation is the median.
- **Ninetieth Percentile**: the value below which 90 percent of the observations fall. For 29 observations, the 27th-ranked observation is the ninetieth percentile.
- **Maximum**: the largest of the 29 observations observed.
- **Mean**: the average of the 29 observations.
- **Standard Error**: the standard error of the mean is computed as the standard deviation of the 29 observations divided by the square root of 28 (i.e., N-1). The standard error reflects the variability in the estimate of the mean.

Each graph and table comprising the results is described separately.

Graph 1-1: Fund Balance. Six lines displayed on this graph present estimates of the unobligated PCLTF balance[2] over the next 44 years. (Note that while the Model is run for 100 years, this graph shows only 44 years in order to achieve resolution adequate to see clearly the differences among the six lines.) The horizontal axis is time, beginning with year 1, which is fiscal year 1984. The balance (in millions of dollars) is displayed on the vertical axis. Starting from the bottom line in year 44, the six lines are the minimum, tenth percentile, mean, median, ninetieth percentile, and the maximum (the ninetieth percentile and the maximum are so close together that they appear as one line). These six lines show that by year 14, the unobligated PCLTF balance may become and remain negative. The median estimate has a value of approximately $200 million by year 44. As is evidenced by the ninetieth percentile and maximum, there is the possibility that by year 44, the unobligated balance may remain above $1.5 billion.

Graph 1-2: Fund Balance. This graph presents results for Simulation 1 out to year 100. The first 44 years are identical to those presented in Graph 1-1. The same six values are presented, only the scale of the graph is changed. After year 44, it can be seen that the median estimate becomes negative by year 56. This means that there is at least a 50 percent chance that by year 56, the Fund will be in debt. The worst case is represented by the minimum observation, which shows a debt of over $22 billion by year 50 and over $500 billion by year 100. Of note is that the ninetieth percentile unobligated balance is negative in year 100. The maximum estimate, however, exceeds $10 billion in year 100.[3]

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[2] The unobligated balance is relevant because the trigger that turns the tax on and off is defined in terms of the unobligated balance. CERCLA does not define this concept. Of course, the unobligated balance equals the total balance minus obligations. For the purposes of the runs reported here, obligations are defined as the average of the past three years of outlays. The Model offers several options for this definition.

Table I-I: Summary of Facility Population. The facility population is divided into the following categories (reading from left to right in the table):

- Operating Existing Facilities: facilities in operation before year 1 of the simulation that are accepting hazardous waste.
- Operating New Facilities: facilities simulated to open during the Model run that accept hazardous waste for land disposal.
- Closed, Permitted Facilities with Qualification Status Pending: facilities that are in the five-year qualification monitoring period awaiting a determination regarding their ability to qualify into the Fund.
- Closed, Permitted, Qualified Facilities: Closed permitted facilities that have transferred their liabilities to the PCLTF.
- Closed, Permitted, Unqualified Facilities: Closed facilities that were disqualified from PCLTF coverage because of a release or because their financial assurance for post-closure care was inadequate.
- Closed, Non-Permitted Facilities with Qualification Status Pending: Facilities waiting for a qualification determination that were denied final RCRA permits and consequently required to close.
- Closed, Non-Permitted, Qualified Facilities: Closed, non-permitted facilities that have transferred their liabilities to the PCLTF.
- Closed, Non-Permitted, Unqualified Facilities: Facilities that were denied final RCRA permits and consequently required to close.

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[3] Although these numbers appear very large, they are reported in current (i.e., inflation adjusted) dollars. For example, in today's dollars, a $10 billion surplus in year 100 is only about $200 million (which is the current fund ceiling). Consequently, the results demonstrate that in real terms, the Fund is not likely to exceed the current ceiling in the long term.

- Closed, Decontaminated Facilities: Facilities which, when they close, decide to remove all wastes rather than maintain the facility as a disposal facility during the post-closure period.[4]

Table 1-1 displays mean values for the 29 iterations of the Simulation 1 run. Of the 982 existing facilities,[5] 253 are simulated to not desire final permits. By year 50, 211 facilities are simulated to be covered by the Fund and 26 facilities are simulated to have their qualification status pending. The total number of operating facilities declines over time because: (1) the demand for waste disposal is assumed to decline; (2) the average capacity of new facilities is assumed to grow by 1 percent per year; and (3) there is assumed to be excess disposal capacity in year 1 of the Model run. The quick decline in the number of operating facilities over the first five years is attributed to facilities that do not receive final RCRA permits and close immediately.

Table 1-2: Summary of PCLTF Financial Statistics. The mean values of the key PCLTF financial statistics are displayed in this table. Of note are the negative fund balance and unobligated fund balance, even by year 50. It should be noted that the values presented in this table are in current year dollars, i.e., they are influenced by inflation. For example, the growth in non-interest expenditures is, in part, due to inflation. One may question how both interest payments and interest revenues can be reported for a single year (e.g., year 40). This occurs because the results represent means across 29 iterations. If several iterations have interest payments, then the average interest payment will be negative. Similarly, different iterations may have interest revenues. Consequently, the averages across all iterations will show both interest payments and revenues. The average net interest payment/revenue may be calculated by adding the two means (e.g., in year 40, the average net interest payment across all 29 iterations is: -35.21 + 38.53 = 3.32 million dollars).

Table 1-3, Table 1-4, Table 1-5. These three tables provide more detail on the distributions of the key PCLTF financial statistics. The tenth percentile, mean, standard error of the mean, median, and ninetieth percentile are presented for each of the six values. Table 1-3 shows that the tenth percentile, mean, and median balance and unobligated balance are negative in year 60. Without changing the Fund, the ninetieth percentile estimate shows the Fund will likely be negative by year 100. Table 1-4 shows that in many years, taxes are not collected because the unobligated balance exceeds the $200 million Fund ceiling. Table 1-4 is also useful for comparing tax revenues and expenditures. By year 50, the median expenditure climbs above the maximum possible annual tax revenue ($14.1 million) and never again drops below it. This is consistent with the negative balance observed in Table 1-3. This comparison of the time profile of revenues and expenditures is useful for considering questions of Fund adequacy.

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[4] Decontamination only occurs at very small facilties and is not permitted to take place if groundwater contamination is simulated.

[5] The average number of existing facilities simulated in the Model can be calculated by adding across the first row of the table:
982 = 938 + 1 + 36 + 7.

Table I-6: Summary of Annual PCLTF Expenditures. This table presents the components of PCLTF expenditures over time. Of note is that these expenditures are in millions of 1982 dollars and are therefore not influenced by assumptions regarding inflation. The largest individual costs are found in the claims column. As can be seen, some years have large average annual claims expenditures. These values "jump around" because the large claims occur as infrequent shocks to the Fund. The other non-interest costs are a much smoother increasing function over time. Finally, interest payments, which are solely a function of the Fund balance, become very substantial (on average) due to the large negative balances observed in several of the iterations.

Table I-7: Frequency of Releases. Table 1-7 describes the releases that the Model simulates. The table is divided into four parts (7A, 7B, 7C and 7D), with each part presenting results for the seven release types over time.[6] Table 1-7A summarizes the number of releases expected (X), simulated

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[6] The seven release types (described in Chapter 2) are as follows:

- IP On: change in indicator parameters at the on-site monitoring well.
- Detectable On: detectable concentration of constituents at the on-site monitoring well.
- Toxic On: toxic concentration of constituents at the on-site monitoring well.
- Taste/Odor: a concentration of constituents resulting in a detectable taste or odor at the off-site potable well or naturally-occurring body of surface water closest to the facility boundary.
- Detectable Off: detectable concentration of constituents at the off-site potable well or naturally-occurring body of surface water closest to the facility boundary.
- Toxic Off: toxic concentration of constituents at the off-site potable well or naturally occurring body of surface water closest to the facility boundary.
- Bathtub: the filling up of the facility with water leading to contaminated surface runoff. This effect is similar to a bathtub filling with water and overflowing. Of note is that this release is not simulated to occur.

(S), and detected (D) for all the facilities examined in the Model. Expected releases are those which are anticipated to occur based solely on the analysis of the release data inputs to the Model. Simulated releases, which will always be less than or equal to expected releases, are those releases which actually take place in the Model. Most expected releases are simulated to take place, although some are prevented from taking place by response actions which are simulated to be taken. Finally, detected releases are those which the Model estimates will be discovered. A simulated release may go undetected if monitoring actions are not taken at the facility.

Of note in Table 1-7A is the number of releases simulated to have occurred before year 1 (i.e., the top row in the table). Of the 980 existing facilities, nearly one-half (458) are simulated to already have had release type 2 (detectable concentration on site).

Tables 1-7B, 1-7C, and 1-7D provide release information for facilities with qualification status pending, qualified facilities, and unqualified facilities, respectively. Of note in Table 1-7C is the fairly small number of detected releases (particularly off-site) which are covered by the Fund. For example, by year 50, only 12 Type 1 releases (change in indicator parameter on site) are detected at the 211 qualified facilities. There are far more releases detected at unqualified facilities (see Table 1-7D). The qualification requirements clearly weed out many facilities with releases, as would be anticipated.

Table 1-8, Allocated Costs. Table 1-8 presents the total costs allocated over time to owner/operators, states, the Superfund, and the PCLTF. Costs are presented in millions of 1982 dollars and are divided by cost type. The table is divided into three parts, 8A, 8B, and 8C, which present costs for facilities with qualification status pending, qualified facilities, and unqualified facilities, respectively. By comparing these three parts of the table, it is clear that costs at PCLTF-qualified facilities are only a small portion of total costs at all the facilities.

It should be noted that the estimates of personal injury claims are not based on estimates of increased risk of disease caused by releases from hazardous waste disposal facilities. As described in Chapter 2, the claims estimates reflect the potential magnitude of claims that may be brought by individuals who believe they have been harmed. The claims are based on costs associated with the background rates of certain diseases in the general population. Because it is generally very difficult or impossible to identify the causes of these diseases, and because the background incidence is much larger than the incremental incidence likely to be caused by the relevant types of potential exposures, the magnitude of potential claims is modeled based on the background-incidence-induced costs associated with the selected diseases. If the Fund covers these cost types, the claims may be of the magnitude estimated here because the inability to establish causality makes it impossible to separate background disease incidence from incremental incidence.

Table 1-9, Allocation of Monitoring, Response, and Post-Closure Care Costs. Table 1-9 displays how the monitoring, response, and post-closure care costs are shared among owner/operators, PCLTF, the Superfund, and states. Again, the table is divided into three parts by the qualification status of facilities. Only Table 1-9B, Qualified Facilities, shows PCLTF expenditures.

Table 1-10, Allocation of Claims Costs. Table 1-10 is analogous to Table 1-9, but displays the four claim types. Again, only Table 1-10B, Qualified Facilities, shows PCLTF expenditures. Of note is that personal injury claims are simulated to be the largest claim type.

Table 1-11, Summary of Facility/Firm Bankruptcy Status by Year. Table 1-11 shows the combined effect of routine business failures and business failures induced by the costs of monitoring and response actions and claims. The table is divided into four main sets of columns, with each set displaying the results for a size category of firm. For example, the first set is for facilities owned by firms with a net worth of less than $10 million. At the beginning of year 1, the table shows that there are (an average of) 243.9 facilities owned by firms in this net worth category. During the first year, firms owning a total of 11.59 facilities (on average) go out of business. Consequently, 232.3 facilities are owned by solvent firms in the following year. This 11.59 facilities going bankrupt out of 243.9 equals a bankruptcy rate of 4.76 percent, also shown in the table.

Table 1-11 shows a very high bankruptcy rate for small firms (with net worths under $10 million). During the first 10 years (when permits are issued and corrective actions are initiated), the bankruptcy rate averages over 7.5 percent per year. This is almost 20 times the historical background bankruptcy rate used for these firms (0.42 percent per year). The high rates are caused by the costs allocated to the firms.

The larger firms (greater than $10 million in net worth) have lower bankruptcy rates. These lower rates are caused both by their lower historical background rates (0.26 percent per year) and because larger firms are better able to handle the costs allocated to them. These results include the fact that larger firms are more likely to own multiple facilities (thus exposing them to larger costs).

Table 1-12, Average Occurrence of Releases. This table summarizes the timing and frequency of releases simulated to occur at all facilities included in the Model, not just those covered by the Fund. The table is divided into two parts, existing facilties and new facilities. Each part displays information about the seven release types for facilities that have been analyzed for at least 50 years or at least 75 years. For example, under the "50 years since opening" section, 0.45 (i.e., 45 percent) of existing facilities had release Type 1 (change in indicator parameter on site). On average, it took 4.6 years for this release to occur at these facilities. Facilities that have been analyzed in the Model for less than 50 years are not included in this estimate. Because all existing facilities were analyzed for the entire Model run (100 years), all existing facilities are included in the 50-year and 75-year estimates.

The new facilities segment of this table shows virtually no releases. Virtually no releases are simulated because new facilities are modeled to be opened only at locations that are in the one-third of all locations least likely to have a release.

Table 1-13, Summary of Costs. Table 1-13 summarizes the cost estimates simulated in the entire Model run. For each type of action (monitoring, response, and routine care) and for each claim type, the following information is presented:

- Number of Observations: the number of times the Model estimates the cost in the entire Model run;
- Minimum: smallest cost estimated;
- Mean: average cost estimated; and
- Maximum: largest cost estimated.

For the actions, the fraction of times that each action could not be taken due to lack of funding is also reported. This lack of funding occurs when neither the owner/operator, the PCLTF, the Superfund, nor a state fund is available to pay for the action. The owner/operator may be out of business, the facility may not be qualified for Fund coverage, the particular type of cost may not be covered by the Superfund, and the facility may be located in a state without an applicable state funding mechanism. For example, 17 percent of the time, it was not possible to undertake monitoring for indicating parameters on site. For this percentage of time, the action was not taken.

For the claims, the fraction of generated claims determined not to be legally valid is reported. These estimates reflect the portions of the claims that are simulated not to be legal liabilties of the facility under existing state and federal law. Additionally, the fraction of claims not compensated is also reported. Claims are not compensated when neither the owner/operator, PCLTF, Superfund, nor state funds are available to pay the harmed parties.

The graphs and tables described above form the quantitative output from the PCLTF Simulation Model. These results of the modeling exercise provide an internally-consistent estimate of the potential future performance of hazardous waste land disposal facilities and the PCLTF. In interpreting these results and drawing conclusions, one must look beyond the numbers themselves to understand the important factors and assumptions that drive the results. By using the results in this manner, the PCLTF Simulation Model provides a basis for identifying the key controlling factors in the complex PCLTF situation.

The following section discusses conclusions regarding PCLTF adequacy based on the Simulation 1 results.

4.1.3 PCLTF Adequacy in Simulation 1

To assess the adequacy of the PCLTF, a clear definition of the concept of adequacy is required. Although a variety of quantitative adequacy measures may be used, each is somewhat arbitrary in its consideration and evaluation of various factors. Consequently, a qualitative approach for assessing the adequacy of the PCLTF is adopted here.

For this discussion, the PCLTF is considered adequate for the purposes described in CERCLA if Fund revenues are likely to equal or exceed Fund expenditures over the foreseeable future. Because there is considerable uncertainty about both future revenues and expenditures, this assessment of adequacy will itself be uncertain. Just how certain one must be in order to proclaim that the Fund is "adequate" depends on the decision-maker's perception and evaluation of the risks of being incorrect in the determination. Being incorrect could result in a Fund that is either inadequately funded or with very large positive balances. Neither prospect of being incorrect is attractive.

Because of the subjective nature of the adequacy determination, the emphasis here is on the insights that may be gained from the quantitative model results. Although the authors' opinions are expressed below, the final judgment clearly resides with the appropriate decision-making authorities.

The model results for Simulation 1 indicate:

- There is less than a 50 percent chance that the PCLTF will go into debt over the next 50 years, although a substantial potential exists. The potential for expenditures exceeding revenues within the next 50 years is caused by the possibility of one or more large third-party claims being brought against the Fund during that time. The solvency of the Fund is sensitive to the large "shocks" or peaks caused by the advent of these claims.

- The long-term outlook for the Fund indicates expenditures consistently exceeding potential tax revenues, resulting in negative Fund balances when interest revenues are insufficient to make up the shortfall. The possibility of having a solvent Fund over the long term without making changes in its funding or expenditure policies appears to be very unlikely (the ninetieth percentile estimate is negative by year 100).

- The Fund is not likely to build up a large, unused positive balance. The ninetieth-percentile estimate of the balance only reaches $3 billion (near year 60) and becomes negative by year 100. Although the maximum estimate of the balance exceeds $10 billion by year 100, this balance is only on the order of $200 million in

1982 dollars (using the inflation rates adopted in the Model).

- The potential debt of the Fund is very large. The tenth percentile estimate of the balance in year 100 is a debt of nearly $245 billion. The minimum estimate in year 100, a debt of over $500 billion, is nearly $9 billion in 1982 dollars.

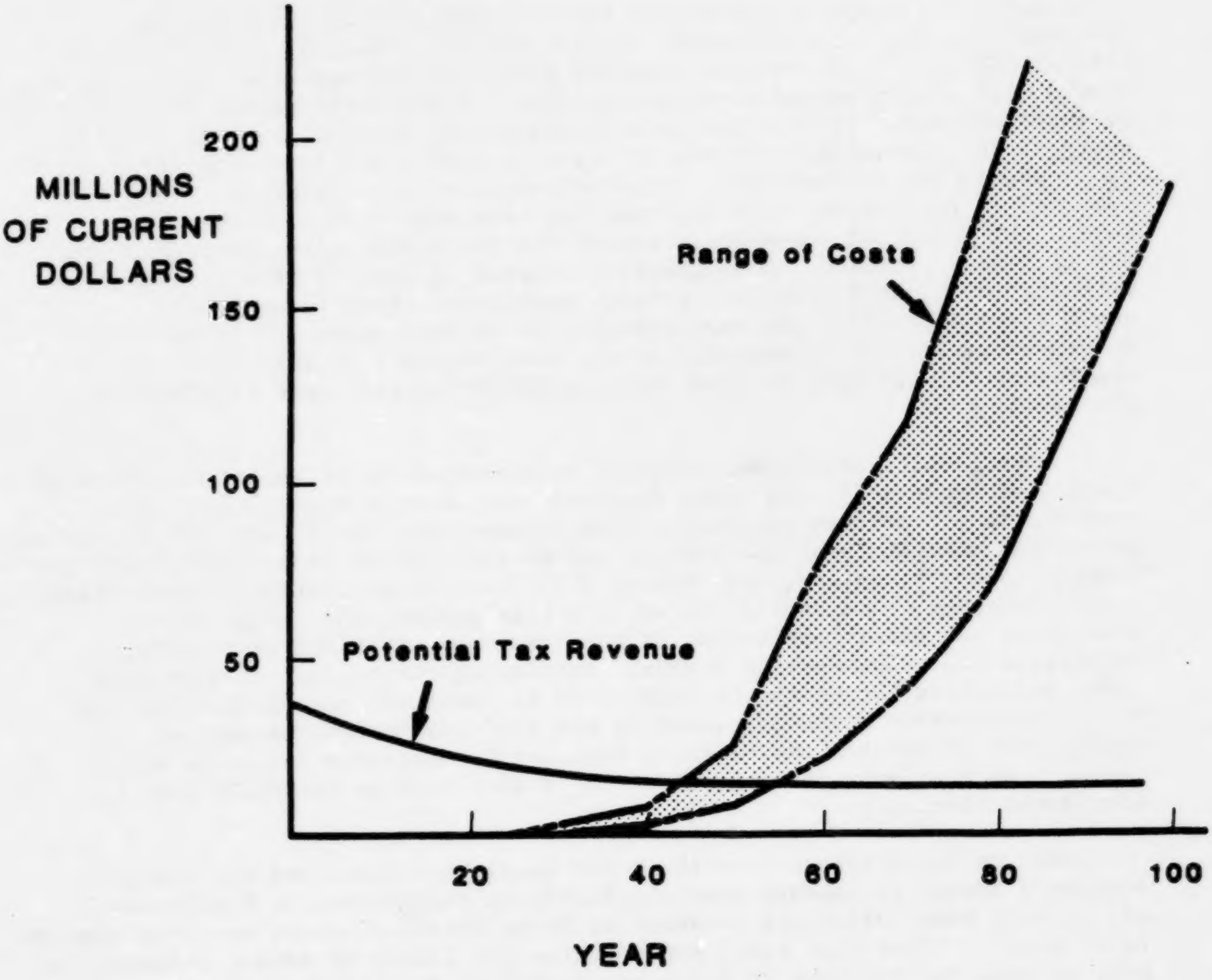
Exhibit 4-2 compares non-claims Fund expenditures to potential tax revenues over the first 80 years. As the exhibit shows, it is very likely that expenditures will routinely exceed potential tax revenues, even when the shocks from claims expenditures are omitted. These costs exceed potential tax revenues because: (1) the tax base is assumed to decline over the first 50 years of the simulation; (2) the tax rate is kept fixed in nominal terms at $2.13 per dry-weight ton; and (3) costs increase with inflation. When compared in real terms, (i.e., if the tax rate were held constant in real terms) the potential taxes would exceed the non-claims costs throughout the entire period examined. Consequently, increasing the tax rate to keep pace with inflation would certainly provide sufficient funds to cover all non-claims costs under the assumptions used in Simulation 1. In fact, as discussed in Chapter 5, keeping the tax rate constant in real terms is sufficient (on average) to cover all the PCLTF-covered costs simulated in Simulation 1.

As the results also show, interest revenues can be an important source of funds (see Table 1-5). The real interest rate used in Simulation 1 is approximately 1 percent per year. This assumes that the future real return on government securities is the average annual real return from 1960 to 1982 for 3-month, 6-month, 3-year, and 10-year U.S. Treasury securities (when compared to the Consumer Price Index). Over this time period, the longer-term securities had returns in excess of this average, while the short-term securities had below-average yields. Insofar as future real returns from these securities (in which the Fund would be invested) exceed the rate used here, the interest revenues earned by the Fund may be underestimated. Of course, the advantages and risks of counting on uncertain future interest revenues as a primary funding source for a fund such as the PCLTF must be considered carefully.

Based on the evidence from the PCLTF Simulation Model and the insights discussed above, it appears that the PCLTF, as represented in Simulation 1, will likely have sufficient revenues to cover potential costs over the next 20 to 40 years. After that time, expenditures are likely to exceed revenues, in part because the tax rate is fixed in nominal terms. If the tax rate were held fixed in real terms, it is likely that the Fund could remain stable throughout the 100-year period examined (alternative revenue policies are discussed more fully in Chapter 5). The next section presents results for four alternative simulations.

EXHIBIT 4-2

COMPARISON OF PCLTF NON-CLAIMS
EXPENDITURES TO POTENTIAL PCLTF TAX REVENUES



4.2 POLICY SIMULATIONS

This section presents the results of four policy simulations using the PCLTF Simulation Model. The four simulations (Simulations 2 through 5) are each defined in terms of how they differ from Simulation 1. Then, the manner in which the results of each simulation differ from the Simulation 1 results is described. Finally, the distribution of costs among potential funding sources is discussed.

4.2.1 Definition of the Four Policy Simulations

Exhibit 4-3 displays how each of the policy simulations differs from Simulation 1. These differences relate to Fund coverage and projected waste volume. Only the aspects of the policy simulations which differ from Simulation 1 are displayed in Exhibit 4-3. A blank space in the exhibit indicates that the same value was used for both the policy simulation and Simulation 1. The policy simulations are as follows:

Simulation 2. Partial Ban on Land Disposal. In Simulation 2, wastes are modeled to decline by 50 percent over the first 10 years of the Model run. Waste disposal continues to decline by 2 percent per year through year 50. In Simulation 1, waste disposal declines by 2 percent per year through year 50. In all other respects, Simulation 2 is identical to Simulation 1.

Simulation 3. PCLTF Coverage of Non-Routine Monitoring and Response Costs Following Qualification. In Simulation 3, the costs of non-routine monitoring and response actions are covered by the PCLTF during the 30-year post-closure period at qualified facilities.

Simulation 4. Elimination of Claims from PCLTF Coverage. This simulation eliminates third-party claims from PCLTF coverage. The claims costs are allocated to owner/operators and state funds as they are available. The allocation of large claims to owner/operators forces them to terminate business in some situations.

Simulation 5. No PCLTF. Simulation 5 analyzes the situation assuming that the PCLTF does not exist. At facilities that would otherwise be eligible for PCLTF coverage, the Superfund is simulated to cover the costs of natural resource damages after closure as well as response costs starting 30 years after closure. All other third party claims are simulated to be the responsibility of the owner/operator. If the owner/operator cannot meet the costs of third party claims, a state fund may cover these costs, otherwise they remain unfunded. State coverage of routine monitoring, maintenance and care is simulated beginning 30 years after closure. If a state fund is not simulated to exist to cover these routine costs, then the actions are not taken. All other assumptions about funding sources and the conditions under which payments will be made are the same as Simulation 1.

EXHIBIT 4-3

SUMMARY OF SIMULATIONS

	SIMULATIONS				
POLICY	1	2	3	4	5
Qualification					
Monitoring Period	5 years				No PCLTF
Releases	None allowed				No PCLTF
Financial Assurance	Must be adequate during qualification monitoring period (5 years)				No PCLTF
RCRA Permit Required	Yes				No PCLTF
Coverage					
Routine Monitoring and Care	After post-closure period (30 years)				No PCLTF
Non-Routine Monitoring and Care	After post-closure period (30 years)		After qualification (5 years)		No PCLTF
Third-Party Claims	After qualification (5 years)			Not covered	No PCLTF
Fund Revenues					
Tax and Ceiling	Fixed in nominal terms				No PCLTF
Waste Volume	Decrease by 25 per year through 2033 (i.e., for 50 years)	Decrease by 505 by 1993, then 25 per year through 2033			

4.2.2 Policy Simulation Results

The results of simulations 2, 3, 4, and 5 are described below. For the reader's convenience, the graphs and tables for all of the runs are bound in Volume II together with the Simulation 1 graphs and tables. The following discussion emphasizes the differences between the policy simulation results and the Simulation 1 results. Because the interpretation of each of the output tables was presented above for Simulation 1, each table is not discussed individually for all the policy simulations. The reader may find it useful to refer back to Exhibit 4-3 for the definition of how the simulations differ from Simulation 1.

Simulation 2. Partial Ban on Land Disposal. The assumption that waste volume declines by 50 percent over the next 10 years has two important effects on the results of this simulation. The first is that the number of new facilities is much lower than in Simulation 1. By year 50 in Simulation 1, there are 217 operating facilities, as Table 1-1 shows; in Simulation 2, there are only 138 (see Table 2-1). Although there are many fewer new facilities, the total costs of response and monitoring actions and claims are only slightly reduced during the period examined. This is because most costs occur at existing facilities. As seen in Tables 1-7A and 2-7A, there are approximately the same number of releases in the two runs. This result is due to the fact that new facilities have very few releases.

The second important impact of decreasing wastes is its effect on tax revenues. Because the volume of wastes determines the tax base, declining wastes imply less tax revenues to the Fund. This is evident in Table 2-4 where, after 50 years, tax revenues are, at a maximum, about $8 million per year. In Simulation 1, annual tax revenues may exceed $14 million after year 50.

Simulation 3. PCLTF Covers Non-Routine Monitoring and Response Costs Following Qualification. The impact of this policy is to increase PCLTF expenditures on response actions. In this simulation, these actions are covered by the PCLTF rather than by owners/operators, the Superfund, and state funds. By year 50, these expenditures are approximately three times the levels in Simulation 1 (see Table 3-6 and Table 1-6). By year 100, the difference is approximately two times.

The long-term outlook for this Fund configuration is similar to that of Simulation 1. Although expenditures for response actions are considerably higher, claims continue to dominate total expenditures by the Fund. Claims are the major factor leading is a large Fund debt.

Simulation 4. Elimination of Claims from PCLTF Coverage. By eliminating third-party claims from Fund coverage, large expenditure shocks are avoided. Additionally, there can be no PCLTF expenditures over the next 30 years (because non-claim costs are only coveraged after the end of the post-closure period). As a consequence, a large positive balance can be built up which yields substantial interest revenues.

A comparison of Table 4-1 and Table 1-1 shows that the facility populations are nearly identical for the two runs. Also, Table 4-6 and Table 1-6 show that the monitoring, response, and post-closure care expenditures are nearly equivalent. Consequently, the only difference between the runs is the elimination of coverage for third-party claims.

Simulation 5. No PCLTF. Because the PCLTF is not included in this simulation, the output tables presented in Volume 2 contain no information on the Fund's financial performance. For those tables that provide information about facilities based on Fund qualification status, results are presented for facilities which would have been pending, qualified, or unqualified using the assumptions about qualification from Simulation 1. Because this simulation omits the PCLTF, facilities do not actually have a qualification status and there are no Fund payments at any facility.

The population of facilities over the next 100 years is quite similar to that estimated in Simulation 1. For example, by year 100 there are estimated to be a total of 1,234 facilities (both open and closed), in both simulations.

The primary effect of omitting the PCLTF is a change in both the level of funds available to cover costs at land disposal facilities and the mix of sources providing such funds. In general, at facilities which would have qualified for PCLTF coverage, personal injury and property damage claims become the responsibility of owners and operators, or in the event of bankruptcy, a state responsibility. Claims for natural resource damages at these facilities become the responsibility of the Superfund, with subsequent cost recovery from owner/operators if possible. Similarly, should a required corrective action go unfunded at some point after the post-closure period has ended, Superfund action would be expected. Finally, because owner/operators are responsible for the costs of routine monitoring and care only in the 30 years after closure, these costs would go unfunded after 30 years in the event that state monies were unavailable.

4.2.3 Distribution of Costs

This section describes the allocation policy used for Simulation 1 and the differences between it and the policies used for Simulations 2 through 5. The results of all five simulations are examined to determine variations in the cost burden faced by different funding sources. The method by which the Model allocates these costs among different funding sources is explained in Section 2.3.2.4, Allocation Policies.

Exhibit 4-4 presents the allocation policy used for Simulation 1. The intent of the policy is to reflect EPA's interpretation of current statutory and regulatory requirements concerning the funding sources that are responsible for different types of costs over a facility's lifetime. In the PCLTF Model, two of these funding sources, the owner/operator (including its financial assurance mechanism) and the states, may be simulated to be unable to cover a particular cost. In such cases, the Model looks for another party in the chain of responsibility to cover the cost. The other two funding sources, the Superfund and the PCLTF, are simulated to be fully adequate to cover any cost allocated to them. Exhibit 4-5 presents the differences

EXHIBIT 4-4

ALLOCATION OF COSTS AMONG FUNDING SOURCES BY TYPE OF COST 1/

Funding Source	Routine Monitoring and Care	On-Site Response Action	Off-Site Response Action	Third-Party Claims
Owner/Operator 2/	During operation and 30 years after closure	During operation and 30 years after closure	During operation and 30 years after closure	In perpetuity, except if qualified for PCLTF
PCLTF	Beginning 30 years after closure, if qualified	Beginning 30 years after closure, if qualified	Beginning 30 years after closure, if qualified	After closure, if qualified
States	After closure, if other sources fail	Not responsible 3/	Not responsible 3/	After closure, if owner/operator fails; and is not qualified for PCLTF; all claims other than natural resource damages
Superfund	Not responsible	During first 30 years after closure, if owner/operator fails; if 30 years after closure, has full responsibility if not qualified for PCLTF	During first 30 years after closure, if owner/operator fails; if 30 years after closure, has full responsibility if not qualified for PCLTF	After closure, for natural resource damages only

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1/ For Simulation I.

2/ Includes owner/operator financial assurance mechanism.

3/ States are assumed to pay for 10 percent of Superfund expenditures at privately-owned facilities and 50 percent at state- and municipally-owned facilities.

EXHIBIT 4-5

DIFFERENCES IN ALLOCATION OF LAND DISPOSAL COSTS FOR SIMULATIONS 2 THROUGH 5

Simulation	Differences from Simulation 1[1]
2 - Partial Ban on Land Disposal	No difference in cost allocation policy.
3 - PCLTF Coverage of Non-Routine Monitoring and Response Costs	PCLTF covers both on-site and off-site responses between 5 and 30 years after closure, if facility qualified.
4 - Elimination of Claims from PCLTF Coverage	PCLTF does not cover claims; if owner/operator fails, Superfund covers natural resource claims, states cover (if possible) all other claims.
5 - No PCLTF	PCLTF eliminated as a funding source.

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[1] Only differences from Simulation 1 are presented. If a particular type of cost or funding source is not presented, the policy is the same as in Simulation 1.

between the allocation policy used for Simulation 1 and those used in Simulations 2 through 5.

The effect of the different allocation policies on the distribution of costs is shown in Exhibit 4-6. Of note is the fact that there is very little difference among the results for the simulations. This is because the PCLTF covers such a small fraction of all costs. Variations in PCLTF policy have very little effect on the overall distribution of costs. In all simulations, about 13 percent of the costs associated with land disposal facilities are not covered by any funding source. Slightly more than 80 percent of the costs are covered by owner/operators or their financial assurance mechanism. The remainder of the costs are simulated to be borne by the states or the Superfund.

4.3 CONCLUSIONS

This chapter has described initial estimates of the future PCLTF balance for four alternative Fund configurations. Also, a fifth configuration, No PCLTF was examined. The estimates are based on the PCLTF Simulation Model which was developed for the purpose of assessing PCLTF adequacy. The Model is limited in a variety of ways which are discussed in Chapter 6. Many of its limitations are inherent in virtually all models seeking to project far into the future. As these results are circulated and reviewed, adjustments to various aspects of the Model will likely be forthcoming. Nevertheless, the insights gained from the results presented here are valuable in their own right, and should prove to be useful in the debate surrounding the appropriate configuration for the PCLTF.

Based on the results presented above, the following insights may be obtained:

- As configured in Simulation 1, the PCLTF revenues would not be adequate for ensuring Fund solvency in the long term (over the next 100 years). However, there appears to be no need for concern over the next 20 years because major Fund expenditures remain years away.

- The ability to raise revenues through a waste-end tax in the long term is very uncertain. As shown in Simulation 2, restrictions on future land disposal or the introduction of new treatment and process technologies may reduce future taxable waste substantially (without significantly reducing PCLTF expenditures over the same time period).

- These analyses have identified the fact that over the next 50 years the Fund is likely to have a positive balance, making the Fund "adequate." However, the question of Fund adequacy can also be addressed in terms of whether the Fund is meeting its stated objectives. Exhibit 4-6 shows the relative contribution of the funding sources. As the exhibit shows, the overwhelming majority of expenditures is made by Superfund and owner/operators. The PCLTF pays very little (as a fraction of the total).

EXHIBIT 4-6

DISTRIBUTION OF COSTS AT LAND DISPOSAL FACILITIES OVER 100 YEARS WITH 6% DISCOUNT RATE 1/

(in millions of 1982 dollars)

	Simulation 1: Current PCLTF		Simulation 2: Partial Ban on Land Disposal		Simulation 3: Coverage of Corrective Action		Simulation 4: Elimination of 3rd Party Claims from PCLTF		Simulation 5: No PCLTF	
Funding Source	Costs	Percent of Total Costs	Costs	Percent of Total Costs	Costs	Percent of Total Costs	Costs	Percent of Total Costs	Costs	Percent of Total Costs
PCLTF	89	1	93	1	95	1	5	* 2/	0	0
Owner/Operator 3/	8,291	82	8,174	81	8,457	84	8,325	83	8,571	85
Superfund; States	370	4	383	4	382	4	374	4	378	4
Total costs covered	8,750	87	8,650	86	8,934	89	8,704	87	8,949	89
Total costs not covered 4/	1,282	13	1,382	14	1,098	11	1,328	13	1,083	11
Total costs	10,032	100	10,132 5/	100	10,032	100	10,032	100	10,032 6/	100

1/ Costs include routine monitoring and care, on-site and off-site response actions and third party claims during operating life and after closure.

2/ Less than .5%.

3/ Includes owner/operator financial assurance mechanism.

4/ The total costs not covered by any funding source was computed in two steps. First, a supplementary Model run was performed using an allocation policy providing full funding for all costs at all times. This provided an estimate of total costs of $10.032 billion. Second, the total covered cost for each simulation was subtracted from $10.032 billion to yield an estimate of total costs not covered. This estimate may be a lower bound because in the absence of a funding source, an action will not be taken immediately. When it is ultimately taken, its cost may be higher. Thus, total costs not covered, and consequently total costs, may be higher than indicated for each simulation.

5/ May be an overestimate of total costs because there are many fewer new facilities in Simulation 2.

6/ May be an underestimate of total costs because without the PCLTF some actions may not be taken that prevent subsequent releases from occurring. Consequently, the estimate for costs not covered may also be an underestimate.

Consequently, as configured in Simulation 1, the Fund plays a very minor role in protecting the environment and human health and welfare (relative to other sources). Because Fund coverage is so limited, the Fund may provide little or no incentive for owner/operators, as envisioned in the drafting of the legislation. Therefore, the Fund as currently configured may not be meeting its objectives. Also, small modifications in the Fund's qualification or coverage policies could result in substantial increases in Fund expenditures, thereby causing the Fund to no longer be solvent.

CHAPTER 5

REVENUE ANALYSIS

5.1 INTRODUCTION

The previous chapter presented the results of several policy simulations of the PCLTF Model. In this chapter, we examine ways in which the Fund might be managed to achieve certain policy goals. Such goals might include attaining a desired reserve in the Fund or setting a tax rate in year 1 that will remain unchanged over time and will yield a given balance in year 100. Fund managers can seek to achieve these and other goals by varying several revenue parameters that relate to the management of the Fund.

As a supplement to the PCLTF Simulation Model, a revenue analysis module has been developed to permit a detailed analysis of the Fund's revenue parameters. Once a given expenditure policy has been simulated using the Model, the revenue analysis can be used to evaluate different revenue policies. This module can test various rules for the operation of a Fund floor, a Fund ceiling, and Fund tax policy. The output of this module includes estimates of the tax rate and Fund balance over time as well as other financial variables of interest. Like the PCLTF Simulation Model, its output consists of results for each of 29 iterations and is summarized using the same statistics discussed in Chapter 4.

The revenue analysis takes as input the simulated expenditure stream from each iteration of a Model run. Consequently, the revenue analysis does not simulate interactive effects between revenue policies and any of the events simulated in the PCLTF Model run. For example, the revenue analysis module would not simulate the decline in waste volume that might be evoked by an increase in the tax rate. In other words, the revenue analysis is conducted on the results of a single Model simulation, thereby holding the stream of Fund expenditures constant while allowing other financial parameters to vary.

While the revenue analysis examines Fund rules and tax policies that may change over time, no distinction is made among the methods used to implement these changes. For example, some adjustments to funding policies may be made automatically, as with the provision that suspends the current tax of $2.13 per dry weight ton when the unobligated Fund balance exceeds $200 million. Alternatively, changes could be made at the discretion of EPA or could require Congressional approval. Rather than focusing on the parties responsible for setting and adjusting the Fund rules and tax policies, the revenue analysis simply simulates the financial effects of such changes.

This chapter presents an overview of the revenue analysis module and summarizes the results obtained from a revenue policy analysis of four of the five PCLTF simulations discussed in Chapter 4. (A revenue analysis is not performed for Simulation 5, No PCLTF, because there is no fund.) First, the revenue analysis is defined, including its inputs and outputs. Next, the specific revenue policy used in this chapter is presented. This is followed by a discussion of results, which include break-even tax rates (defined below) for each simulation and estimates of the financial parameters of interest.

5.2 DEFINITION OF THE REVENUE ANALYSIS

This section describes the revenue analysis. The types of inputs necessary to define a revenue policy are presented, followed by an explanation of the output.

5.2.1 Defining the Revenue Policy

In order to conduct a revenue analysis, a specific revenue policy must be defined. The policies examined here involve rules governing Fund floor and ceiling operations, a definition of the tax base and an initial tax rate, and the means of treating revenue recoveries from potentially-liable parties. Each of these factors is discussed below.

5.2.1.1 Fund Floor and Ceiling Rules

A Fund ceiling is simply a level of the Fund which, when exceeded by the actual balance, results in some set of actions being taken. Currently, if the unobligated PCLTF balance exceeds $200 million, the tax on hazardous wastes is suspended. A floor operates in much the same way so that when the balance drops below a given level, some action is taken. (Note that the action(s) need not be automatic, as is currently the case with the tax switching off when the ceiling is reached. Non-automatic actions which are reasonably anticipated to occur can also be modeled.)

Both a Fund ceiling and floor can be useful in modeling the performance of the Fund, given the large uncertainty regarding future revenues and expenses. There is considerable uncertainty regarding, for example, the size of the tax base over time (i.e., the amount of land disposal) and the rate of spending that will follow from several probabilistic processes (i.e., monitoring, response, and claims activities). As a result, the balance in the Fund may deviate from initial expectations. By modeling Fund management actions in response to the balance exceeding a ceiling and falling below a floor, a realistic picture of future Fund performance and potential Agency or congressional response can be developed.

The initial floor and ceiling are inputs to the revenue analysis, although neither is required. If they are used in the Model, the floor or ceiling may be held constant in nominal terms or may be adjusted for inflation.

The floor or ceiling may also be adjusted using the concept of Fund reserves. Fund reserves are the number of years of expected spending represented by the Fund balance. If, for example, the Fund balance is $300 million and expected annual spending is $75 million, reserves are equal to four years. A floor or ceiling can thus be defined in terms of reserves. For example, the floor might be set at five years of expected spending. As spending levels change, the floor would be automatically adjusted. The revenue analysis module has a series of options that allow the user to control the timing, frequency, and magnitude of such adjustments. These options serve to limit the number of small or "fine-tuning" adjustments that would otherwise occur. Both the inflation- and reserves-based adjustments may be made in a single revenue analysis.

5.2.1.2 Tax Rules

An important use of a Fund floor or ceiling is to identify when adjustments to the tax base and/or tax rate are required. Both a floor and ceiling may be used to hold the Fund balance within an acceptable range. Reaching either threshold may imply the need to adjust one or more of the factors that affect the balance. Because the revenue analysis is performed for a given estimate of PCLTF expenditures simulated by the Model, it does not simulate changes in expenditure policy. Consequently, the module simulates only changes in the tax base or tax rate. Each is discussed below in turn.

The PCLTF tax is levied on the land disposal of hazardous wastes. Currently set at $2.13 per dry weight ton, this tax could be levied instead on the volume of waste disposed or on its wet weight. Either change could be used to expand the base of material subject to taxation and increase the amount of Fund income for a given tax rate. The module can simulate such a switch in the tax base in response to reaching either the floor or ceiling (i.e., if the balance is below the floor, the base would be expanded if possible; if at the ceiling, the opposite is done).

The revenue analysis module is also able to make changes to the tax rate. The simplest such adjustment is to index the tax rate to inflation. While this addresses the problem of the general decline in the value of money brought about by inflation, it does not reflect factors unique to the PCLTF. A great number of forces besides inflation affect not only the market for hazardous wastes (i.e., the tax base) but also the simulated expenditure streams of the PCLTF.

Either in lieu of or in addition to inflation adjustments, the revenue policy may call for changes in the tax rate as a function of the Fund balance. The tax can either be suspended or it can be adjusted downward when the ceiling is reached. Similarly, if the floor is reached, the tax can be adjusted upward. As with the floor and ceiling adjustments, the user can limit the magnitude, frequency, and timing of tax rate changes.

The revenue analysis module has an added feature, called the "break-even analysis," which can calculate the tax rate that will produce a balance of a given size in the final year of the model run. This analysis is independent of the various potential floor and ceiling adjustments and does not make use of the tax adjustments just discussed. For each estimate of future PCLTF spending (i.e., the result of each PCLTF Model iteration), this procedure determines the initial tax rate which, if collected every year, produces the desired ending balance. This is done by computing the tax rate that results in sufficient tax revenues being collected so that total Fund revenues (including both tax and interest revenues) minus Fund expenditures equal the target balance at the end of the simulation. Results are presented for both an inflation-adjusted rate and a nominally-constant rate.

Because the break-even analysis is conducted for each iteration, a series of rates is computed for each run (a run has 29 iterations). Given that the tax base and target balance are the same for each iteration, the break-even tax rate varies across iterations because the simulated PCLTF expenditures vary. The mean, median, tenth and ninetieth percentiles of the break-even tax rates are estimated for each of the four simulations. While the mean or median may be treated as the best estimate of the appropriate tax rate, there still remains some residual uncertainty. For example, if the median break-even tax rate is used (and remains unchanged), there is a 50 percent chance that the Fund will have more money than expected, and a 50 percent chance that the Fund will have less money than expected. This uncertainty can be evaluated by examining the standard error of the mean along with the tenth and ninetieth percentiles.

5.2.1.3 Recoverability of Fund Expenditures

Recoverability refers to the authority and ability of the PCLTF to seek and obtain revenues from parties such as owner/operators, generators, and insurers as compensation for expenditures made by the Fund. Recoverability is an important facet of revenue policy because recovered monies may contribute significantly to Fund balances. Recoverability is not simulated at the facility level; instead, it is tracked in the aggregate for each of several cost types. Different cost types (i.e., routine monitoring, off-site cleanup, and so on) are treated separately in the recoverability analysis because economic and regulatory considerations might lead to different recoverability rates. For example, the Fund might be more successful in recovering the costs of on-site cleanup than damage claims for natural resources. Further, the revenue analysis module can incorporate delay factors for recoverability. Thus, one type of cost might be recovered in two years, while another requires five.

5.2.2 Revenue Analysis Outputs

Once the revenue analysis has been completed, several results may be evaluated. First, the values of important Fund parameters may be examined for each year of the simulation. Second, information is presented about the number and magnitude of changes to the floor, ceiling, tax rate, and tax base. Finally, the break-even analysis presents estimates of the minimum required tax rate. Each of these outputs is briefly explained below.

Fund Parameters. For a given PCLTF spending profile (i.e., the output of the PCLTF Model simulation run) and revenue policy (i.e., the inputs to the revenue analysis module), several key Fund parameters are tracked during the time horizon of the Model. For each year of the Model run, statistics (the median, tenth percentile, ninetieth percentile, mean, and standard error) are presented for each of the following 12 quantities:

- Unobligated balance;
- Balance;
- Non-Interest expenditures;
- Interest payments;
- Tax revenue;

- Interest revenue;
- Fund floor;
- Fund ceiling;
- Tax rate;
- Tax base (dry vs. wet weight);
- Recoveries; and
- Reserves (in years).

Summary of Changes. Changes in the four adjustable Fund parameters (the floor, ceiling, tax rate, and tax base) are also summarized to show their patterns of adjustments. The number of changes to these parameters as well as the magnitude of the changes are presented in tabular form.

Break-Even Analysis. Because the break-even analysis computes tax rates for each iteration of a Model run, results must be presented in summary form. The revenue analysis module thus provides the median, tenth percentile, ninetieth percentile, mean and standard error of the year 1 tax rate for both the indexed tax rate and the constant tax rate.

5.3 SIMULATED REVENUE POLICY

This section defines the revenue policy that is evaluated for each of the first four simulations described in Chapter 4. The purpose of this revenue policy is to define fully a set of rules to guide Fund operations over the time horizon of the Model run.[1] The results of the revenue analysis then allow an evaluation of the effectiveness of the Fund management policy. Defining the revenue policy requires the specification of Fund rules in three areas: floor and ceiling rules, tax rules, and recoverability rules. Each is discussed in turn.

Floor and Ceiling Rules. Initially set at $200 million and $400 million, respectively, the floor and ceiling are adjusted annually by the inflation rate. Both thresholds are also adjusted based on Fund reserves. Over time, the floor is adjusted to be equal to five years of expected spending, while the ceiling is set equal to ten years of expected spending (expected spending is simulated each year using a weighted moving average). These reserves-based adjustments are also limited in the following manner: a single adjustment may not change the floor or ceiling by less than 25 percent or more than 50 percent; changes are made only after the threshold has been breached for five or more consecutive years; and changes can be made no more often than every five years.

Additionally, for the break-even analysis, the target ending balance must be specified. In this case, the target for the year 100 balance has been set at $10.7 billion, which is an amount equivalent to $200 million in 1982 dollars. As noted in Section 5.2 above, the break-even computation is made independently of all other operations in the revenue analysis module. Thus, the target balance affects only the break-even analysis.

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[1] These rules are only one way of defining a revenue policy. Any number of policies can be simulated as long as each can be translated into appropriate model inputs.

Tax Rules. The tax is set initially at $2.13 per dry-weight ton and is adjusted annually by the inflation rate. The tax base is not permitted to change (i.e., the change to a wet-weight basis is not allowed). If the Fund balance exceeds the ceiling, the tax is suspended until the balance drops below the ceiling. When the tax is re-instituted, it is set at the same rate, adjusted for inflation, as it was when suspended. If the balance drops below the floor for five consecutive years, the tax rate is adjusted to reflect the amount of revenue required to reach 110 percent of the floor within five years. The volume of wastes during this five-year period (i.e., the tax base) is estimated given the waste projections used in the PCLTF Model simulation run. The tax may be adjusted no more than once every five years and the adjustment must be a change of at least 10 percent and no greater than 300 percent.

Recovery Rules. Recoveries are not counted on as a potential source of funds for this particular revenue policy. There is little available evidence as to the certainty or magnitude of such recoveries; hence, they are not simulated.

5.4 RESULTS OF REVENUE POLICY SIMULATIONS

The revenue policy described in Section 5.3 was analyzed for each of the first four PCLTF simulations presented in Chapter 4. The results of these analyses are presented in this section. First, an overview of the results is presented and discussed. Then, the break-even analysis of tax rates is presented.

5.4.1 Overview of Results

Exhibit 5-1 presents the key financial results for each of eight scenarios. Each scenario is classified according to the spending simulation involved and whether the revenue policy reflects current law or the simulated policy described in Section 5.3.

The results clearly indicate that the simulated revenue policy leads to stronger Fund performance than the current law. This stronger performance results from, in general, allowing the tax rate to increase and the fact that the ceiling is always higher than under current law, thus allowing longer periods of tax collection. In every case, the simulated revenue policy leads to a higher mean balance; further, Fund balance estimates are more often non-negative, at the tenth percentile. Each simulation is discussed in more detail below.

Simulation 1. Current PCLTF Statute. Under the current PCLTF statute, Fund performance is substantially better with the simulated revenue policy than under current law. Two key reasons are that tax rates are permitted to rise to reflect both inflation and the desire to maintain a balance in excess of five years of expected spending (i.e., the five-year reserves base). Additionally, the fact that the ceiling in the simulated revenue policy begins

EXHIBIT 5-1

RESULTS OF REVENUE ANALYSIS RUNS

Simulation	Mean Balance in Year 50 ($ millions)	Mean Balance in Year 100 ($ millions)	1st Year Year in Which 10th Percentile Balance is Negative	Mean Ceiling in Year 100 ($ millions)
1. Current PCLTF Statute				
• Current revenue policy	-1,440	-91,654	21	200
• Simulated revenue policy	2,282	7,871	22 1/	2,773
2. Current PCLTF Statute with Partial Ban on Land Disposal				
• Current revenue policy	-1,513	-87,288	21	200
• Simulated revenue policy	2,455	5,452	22	2,521
3. Coverage of Non-Routine Monitoring and Response Costs Following Qualification				
• Current revenue policy	-1,602	-103,141	21	200
• Simulated revenue policy	1,904	6,095	21 2/	4,430
4. Elimination of Third-Party Claims				
• Current revenue policy	2,029	8,893	91	200
• Simulated revenue policy	4,501	38,593	--	2,660

1/ The tenth percentile becomes positive again in year 29 before going negative for the years 40 to 84 and 89 to 100.

2/ The tenth percentile becomes positive again in year 26 before going negative for the years 51 to 55, 58 to 86, and 89 to 100.

at $400 million (twice the current $200 million) and is indexed to inflation means that taxes may be collected for a longer period of time. Under the current statute, the ceiling is reached and the tax is suspended in year 6 when the balance is $223 million. In the simulated policy, however, the ceiling is not reached until year 12 when the balance is $689 million. This differential, coupled with the interest on the higher balance, serves to strengthen the Fund significantly.

Of note is that the iterations with the highest expenditures (e.g., the tenth percentile iteration) result in negative Fund balances even with the simulated revenue policy. The claims in these iterations cause the balance to drop dramatically. However, increases in the tax rate enable the Fund to recover (i.e., return to a positive balance) in cases that were not possible with the existing revenue policy. In four of the 29 iterations the tax rate had to be increased an average of nearly $70 per dry weight ton (1982 dollars) during the period examined.

Simulation 2. Current PCLTF Statute with Partial Ban on Land Disposal. In the case of a partial ban on land disposal, the simulated revenue policy again significantly enhances Fund performance. This occurs despite the fact that the tax base is significantly smaller. As in simulation 1, the improved performance is due in large measure to the much larger interest-earning balance that is built up in the early years of the Model run. Also important is the fact that the tax rate is adjusted for inflation. Further, in the later years of the run, the inflation-adjusted ceiling will be much higher than the unadjusted $200 million ceiling under the current statute. Consequently, the tax is collected more frequently and at higher rates. These policies thus offset the effect of a significant reduction in the size of the tax base (i.e., the volume of wastes disposed) brought about by the limitation on land disposal.

Simulation 3. Coverage of Non-Routine Monitoring and Response Costs Following Qualification. Making the PCLTF responsible for non-routine monitoring and response costs (i.e., corrective action) during a facility's post-closure period significantly increases total Fund expenditures. Rather than a year 100 mean balance of -$103 billion (i.e., the result of the current revenue policy), the simulated policy produces a mean final balance of $6 billion. Again, the critical difference involves the higher ceiling. In year 23, the mean ceiling exceeds $1 billion. While it drops below $500 million by year 48, it climbs to over $23 billion by year 91. During the same period, the ceiling under the current revenue policy stays fixed at $200 million. This difference, coupled with inflation- and reserve-based increases to the tax rate, leads to substantially higher revenue collection.

Simulation 4. Elimination of Third-Party Claims from PCLTF Coverage. Because third-party claims represent a large fraction of PCLTF spending, Fund expenditures are much lower in this simulation. Consequently, the improvement in the Fund due to the use of the alternative revenue policy is much smaller in this case than with the first three simulations. Some improvement in Fund solvency does occur, however, with a higher mean ending balance ($38.6 billion vs. $8.9 billion) and a smaller chance of a negative balance (i.e., it eliminates the 10 percent chance of a negative balance in the last nine years of the Model run, which arises under the current revenue policy as shown in Exhibit 5-1). This improvement in Fund solvency is again due to the effect of the higher Fund ceiling. After reaching the ceiling in year 12, the balance does not drop below the ceiling again in any iteration for the remainder of the time horizon. This higher balance, along with the interest it earns, serves to keep the balance from becoming negative.

5.4.2 Break-Even Tax Rate Analysis Results

The results of the break-even tax rate analysis are presented in Exhibit 5-2. As noted previously, these results are not related to the revenue policy described in Section 5.3; instead, they are rates calculated to produce a year 100 fund balance of $10.7 billion (about $200 million in 1982 dollars). As such, the tax is assumed to be collected every year and, other than an inflation adjustment for the indexed rate, is not adjusted.

As expected, if the rate is kept constant in nominal terms, it must start out at a higher level than an indexed rate in order to achieve the target balance. Of note is that the mean and median rates for the constant tax rate in simulations 1, 2 and 3 are above the current $2.13 rate. Tax rates kept constant in real terms may be much lower. An indexed tax rate of $5.00 per dry-weight ton would provide sufficient revenues for the simulations examined here.

5.5 CONCLUDING NOTE

The revenue analysis presented here suggests that numerous fund management techniques can be employed to ensure a target balance. Given the policies and other assumptions upon which the Fund simulations are based, the effects of the alternative Fund management practices are demonstrated to lead to solvent Funds.

EXHIBIT 5-2

SUMMARY STATISTICS FOR BREAK-EVEN TAX RATES[1]
(Dollars per ton)

Simulation	Tenth Percentile	Mean	(Std. Error)	Median	Ninetieth Percentile
1. Current PCLTF Statute					
• Indexed tax rate	.39	1.43	(.23)	1.04	3.04
• Constant tax rate	.99	3.65	(.60)	2.65	7.76
2. Current PCLTF Statute with Partial Ban on Land Disposal					
• Indexed tax rate	.45	2.07	(.30)	1.60	4.80
• Constant tax rate	1.07	4.84	(.70)	3.74	11.22
3. Coverage of Non-Routine Monitoring and Response Costs Following Qualification					
• Indexed tax rate	.49	1.56	(.24)	1.11	3.14
• Constant tax rate	1.26	3.97	(.62)	2.84	8.02
4. Elimination of Third-Party Claims					
• Indexed tax rate	.22	.29	(.02)	.26	.44
• Constant tax rate	.56	.75	(.04)	.66	1.14

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[1] The break-even tax rate is the year 1 rate which results in sufficient tax revenues being collected so that total Fund revenues minus the Fund expenditures equal the target balance in the final year of the simulation (which is $200 million in 1982 dollars).

CHAPTER 6

MAJOR LIMITATIONS AND NEXT STEPS

This chapter discusses the major limitations in the current versions of the PCLTF Simulation Model and the Release Simulation Model. In doing so, this discussion illuminates those aspects of the analysis about which potential users of the results should be particularly aware. Although many of the limitations summarized here are discussed separately in Chapter 2 and Appendices A and B, they are presented together in this chapter to provide an understanding of the overall limitations of the entire analysis.

The first section highlights how key assumptions about EPA policies, the behavior of the regulated community, and the behavior of potential claimants affect estimates of PCLTF adequacy. Changes in these assumptions can have a significant influence on adequacy estimates. Section 6.2 presents the limitations of the general modeling approach. Limitations due to assumptions made to simplify the analysis and the quality of data used are discussed in relation to the PCLTF Simulation Model (section 6.3), followed by details specific to the Release Simulation Model (section 6.4). Finally, section 6.5 briefly enumerates some next steps in the development and use of the PCLTF Simulation Model.

6.1 KEY ASSUMPTIONS AFFECTING ESTIMATES OF PCLTF ADEQUACY

Estimates of PCLTF adequacy reported in Chapters 4 and 5 are contingent on several key assumptions. This section highlights major simplifying assumptions and identifies whether they cause adequacy to increase or decrease. (An increase in adequacy means higher Fund balances over time, a decrease means lower Fund balances.) Appendix A provides detailed descriptions of each assumption, as noted below.

Assumptions may increase or decrease estimates of PCLTF adequacy by affecting estimates of:

- revenues;
- facility qualification;
- the need to take corrective action; and
- claims.

Exhibit 6-1 displays the key assumptions influencing each of these four areas. Regarding revenue estimates, full compliance with the tax and tax collection from injection well and land treatment wastes increase total revenues. Modifying these assumptions would reduce tax revenues so that the Fund would take longer to reach a $200 million balance, and would not recover as quickly from large expenditures. (Tax revenues are described more fully on pages A-116 to A-119.)

By omitting cost recovery revenues from potentially liable parties (e.g., generators) the revenues may be underestimated. It may be different for the

EXHIBIT 6-1

THE EFFECT OF KEY ASSUMPTIONS ON FUND ADEQUACY ESTIMATES

	Assumptions Which Increase Estimates of PCLTF Adequacy	Assumptions Which Decrease Estimates of PCLTF Adequacy
Revenue Estimates	Full tax compliance assumed Tax paid on portion of injection well and land treatment wastes	No revenues from cost recovery
Facility Qualification	Full five-year monitoring period assumed Any release prior to the end of the five-year monitoring period causes disqualification	No disqualifications due to non compliance with RCRA permit requirements
Need to Take Response Actions	Actions fully effective if completed No releases from injection wells or land treatment facilities	Corrective action always required in response to releases at landfill and surface impoundment facilities (no alternative concentration limits)
Claims	Third-party claims are not brought in response to on-site releases Personal injury claims exclude punitive damages, pain and suffering Natural resource damage estimates are restricted to restoration of small areas of contaminated surface water, value of lost recreation, commercial value of fish kills.	The population making personal injury claims is assumed to be 75 percent of all individuals with the types of diseases and conditions which may result from exposure to hazardous substances The claims for medical costs are not reduced by amounts which may be covered by private insurance or other government programs.

Fund to recover from liable parties, but if cost recoveries were significant they might stabilize the Fund against the shock of large expenditures.

Facility qualification is restricted by assuming that any release detected prior to the end of the full five year monitoring period disqualifies a facility from coverage. This assumption limits coverage, and consequently increases estimates of PCLTF adequacy. Alternatively, the potential for disqualification on the basis of non-compliance with RCRA permit requirements is not modeled. This assumption moves in the opposite direction. (Facility qualification requirements are discussed more fully on pages A-139 to A-141.)

The need to take corrective actions is caused by the detection of releases. The number of releases detected is reduced by (1) the assumption that on-site cleanup actions which are completed are fully effective in preventing off-site releases from occurring; and (2) releases are not modeled at injection well and land treatment processes, and consequently response actions are not taken. Balancing against these reductions in actions required is the assumption that all detected releases lead to a requirement to take action. It is assumed that alternate concentration limits are not set by the Regional Administrators. (The factors leading to the simulation of actions are discussed more fully on pages A-124 to A-133.)

The estimates of claims are one of the most uncertain estimates in the Model. Claims estimates are reduced by the assumptions that: (1) claims are not brought in response to on-site releases; (2) personal injury claims are limited to lost wages and medical costs, excluding punitive damages, pain and suffering, and death benefits; and (3) natural resource claims are restricted to small areas with specific impacts. Alternatively, claims estimates are increased by the assumption that the background incidence of diseases and conditions potentially related to exposures to hazardous wastes forms the pool of potential claimants. It is assumed that 75 percent of this background rate makes full claims on the fund. Additionally, it is assumed that the claims are not reduced by amounts paid for by private insurance or other government programs. (Claims are discussed more fully on pages A-81 to A-102.)

Significantly altering the above assumptions can change the estimates of PCLTF adequacy by substantial amounts in the out years. Consequently, in interpreting the Model results, it is important to recognize the roles played by these and other model assumptions. The next section describes the overall limitations to the modeling approach.

6.2 GENERAL MODELING LIMITATIONS

The PCLTF Simulation Model is a stochastic simulation model, meaning that key aspects of the Model are based on probability principles. This modeling approach is limited to providing distributions of expected outcomes (e.g., Fund balance) which are described by various statistics (mean, median, standard error). The model should not be used to generate point estimates of individual outcomes.

The stochastic simulation approach is particularly well suited for describing the characteristics of populations; in this case, the population is hazardous waste land disposal facilities. As a whole, the population of facilities can be described by simulating individual facility characteristics based on the expected distribution of those characteristics throughout the population (the expected distribution may be based on a sampling from the entire population). Although the population as a whole may be well described in this manner, the characteristics of any individual facility may not be. Consequently, the Model is not meant to be used to evaluate the anticipated performance of individual facilities. In order to examine an individual facility, detailed data about that facility would have to be collected and put into a form that the Model could use.

A final caveat regarding the overall Model is that its primary output, the Fund balance over time, cannot be verified empirically. The overall performance of the Model cannot be calibrated by comparing the Model output to observed values. The verification of the Model is therefore limited to the verification of its individual components. As a whole, the Model results can be evaluated only in terms of their reasonableness, intuitive plausibility, and ability to be reproduced.

6.3 PCLTF SIMULATION MODEL

As with all models, the PCLTF Simulation Model is limited by the simplifying assumptions and data underlying its development and use. The most important simplifying assumptions in the Model relate to the presumption of independence among various components of the analysis. For example, one portion of the Model simulates the occurrence of releases, and a separate portion estimates the response costs and third-party claims which arise as a result of the simulated releases. The potentially limiting aspect of this procedure is that the first portion (simulation of releases) is performed independently of the second portion (estimation of response costs and third-party claims). Although the implicit assumption of independence may be valid in the majority of cases, it may be inappropriate for certain situations. Specifically, if potential third-party claims would be very large if a release occurred at a particular facility (e.g., if the only available drinking water source for a large population were at risk), special care may be taken by the owner/operator, or state or federal authorities to ensure that no release occurred. In other words, the magnitude of a release's potential harm could feed back into the likelihood of whether the release occurs. This feedback is not included in the Model.

The importance of not including this particular feedback mechanism depends on two factors:

- whether harms of sufficient magnitude to initiate the heightened concern of owners/operators, state and federal authorities are simulated; and
- whether this heightened concern can successfully influence the likelihood of a release occurring.

A small number of very large third-party claims are simulated in the Model (on average, only one claim in excess of $500 million (1982 dollars) is simulated over the next 100 years). The potential for claims of this magnitude may be sufficient to create the heightened concern needed to cause this feedback mechanism. However, the extent to which this heightened concern can succeed in reducing the chance of a release is unclear, especially for existing facilities which may be well on the way to having a costly release. Influence over future very costly releases is much more easily gained at new facilities because siting in certain sensitive areas can be prohibited. To the extent that very costly releases will be avoided at existing and new facilities due to individuals undertaking special measures, the Model may overestimate these releases.

One way to guard against this potential bias in using the Model results is not to utilize the estimate of the minimum Fund balance. This estimate (and its associated estimate of the maximum Fund expenditure) is more susceptible to this bias than the other estimates of Fund performance. Consequently, less importance should be placed on the estimated minimum Fund balance than would otherwise be appropriate, and greater reliance on the tenth percentile estimate is warranted.

Other similar simplifying assumptions of particular significance include:

- **Availability of State Funding Mechanisms**. The availability of state funding is not influenced in the Model by the availability of PCLTF or other federal funds. One might anticipate that a reduced federal role could prompt increased state involvement. For example, if PCLTF coverage were very broad, states may play a smaller role than if PCLTF coverage were strictly limited. Although the Model does not automatically incorporate this potential relationship, the implications of this feedback can be modeled by using alternative assumptions regarding the availability of state funds. Through successive runs of the Model, one could estimate the increase in unfunded costs due to a restriction of PCLTF coverage. Based on this estimate, one could hypothesize the extent to which states might pick up this slack and the user could then develop an alternative scenario of state funding. This alternative state coverage scenario could then be used to assess the overall implications of a restriction in PCLTF coverage.

- **Actions Taken and Availability of Funds**. The choice of actions taken in response to releases is driven by a set of action policies reflecting current RCRA regulations. The choice and timing of actions are influenced by whether funds are available to take the action. If no funding source is available, the action is presumed not to be taken. If a funding source is available, the action is presumed to be taken as long as the funding source remains available. This procedure provides a rough indication of whether and when actions will be taken. Not included in the analysis is an opportunity for the funding sources to set priorities among competing demands for funds. All required actions are assumed to be taken promptly when funding is available. However, the PCLTF, state funds, and the Superfund may set priorities for actions so that some actions of lesser importance are delayed. These delays may smooth out peaks in funding requirements without substantially affecting total costs over time. Also, if due to a lack of funds, the PCLTF or state funds undertook less expensive actions than those required of owner/operators by RCRA regulation, then Model estimates of PCLTF and state expenditures may be overestimated.[1]

- **Changes in Legal Regimes Over Time**. Legal regimes describing the legal validity of third-party claims (based on state statutory and common law and on federal common law) do not evolve over time in the Model. Clearly, changes may take place in the ability of claimants to establish legal liabilities (for example, CERCLA established liability under federal law for natural resource damage). The rate at which legal regimes change over time may be influenced by the extent to which harmed parties are unable to recover for claims. The importance of this potential third-party influence on the evolution of legal regimes is uncertain. The Model simulates that approximately 15 to 30 percent of third-party claims may not be legally valid under current legal regimes. It is clear, however, that current proposals for victim compensation legislation may have a significant influence on the ability of harmed parties to recover. In fact, the Model may be a useful tool for evaluating the implications of these various victim compensation alternatives.

- **Generator Liability**. As described in Chapter 2, generators are not included as a potential funding source for costs arising at land disposal facilities. The inclusion of generators could not only influence the manner in which costs are distributed among the funding sources, but could also influence the total quantity of generated waste that is placed in land disposal facilities. Generators may prefer other waste management options with less potential future liability.

- **Owner/Operator Behavior**. Potentially important aspects of owner/operator (O/O) behavior are not modeled. Most important, the ability of O/Os to isolate themselves from potential liabilities is not assessed.[2] Because O/Os play a large role in the coverage of costs, their behavior could have significant implications.

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[1] The likelihood of the PCLTF or state funds having a less stringent set of action policies than those imposed on owner/operators may be very small. In particular, the RCRA action requirements are designed to protect the environment and human health and welfare. Altering these requirements for government-sponsored responses may be considered to be inconsistent. The Model may be used to examine the implications of alternative action policies, but as the Model is currently configured, these policies must apply to all parties.

In addition to these simplifying assumptions, the Model is limited by the data that were used to estimate its parameters and relationships. EPA has recently completed several major data collection efforts which represent the best available information on the existing population of land disposal facilities. The analyses presented in this report incorporate these data as well as supplementary information from other sources. However, several important data limitations remain, in part because several estimates of the distribution of facility characteristics throughout the facility population are based on small samples (e.g., fewer than 50 observations). These data limitations include:

- **Facility Characteristics**. The estimates of facility characteristics most limited by data availability and quality are the facility characteristics affecting costs.[3] The important facility characteristics affecting the cost estimates relate to descriptions of the physical characteristics of the site (e.g., depth to groundwater) and to the factors affecting the potential for third-party damages. These characteristics are modeled using representative values and ranges reflecting their expected distributions in the population. However, several of the estimated distributions are based on particularly scanty data, including: use of surface and groundwater near facilities, potential for natural resource damage, and depth to the uppermost aquifer.

- **Response Actions**. Data on response actions are limited in two respects. First, while the best available cost estimates do incorporate uncertainty about hydrogeologic conditions and plume dimensions, only plume dimensions are explicitly simulated by the PCLTF Model.[4] Consequently, hydrogeologic conditions may vary substantially from the conditions upon which the costs estimates are based. In individual situations, actual costs may be higher or lower than those simulated. It is currently believed that fluid removal and treatment will be required for extended periods of time in order to meet the current corrective action

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[2] The bankruptcy of owner/operators due to large costs is assessed. However, actions undertaken specifically to avoid liability are not examined.

[3] Estimates of releases are also limited by data availability and quality. These limitations are discussed separately in the next section.

[4] Geraghty & Miller, Inc., "Stochastic Model of Corrective Action Costs at Hazardous Waste Management Facilities," January 1984.

> regulation.[5] Consequently, once begun, fluid removal is assumed to last the duration of the Model run. However, after the initial cleanup is completed, annual O&M costs may be expected to drop by about 10 percent. Because there is anticipated to be considerable site-specific variability in the timing of this O&M cost change, it is not modeled at this time.

Appendix A describes the PCLTF Simulation Model in detail, including all the data sources and assumptions incorporated into the Model. The reader is encouraged to refer to this appendix for more detail on the specific limitations of particular components of the Model.

6.4 RELEASE SIMULATION MODEL

The simulation of releases is a key aspect of the overall assessment of the adequacy of the PCLTF. The Release Simulation Model developed by Battelle Pacific Northwest Laboratories utilizes standard methods for estimating the transport of groundwater contamination. These methods have been adapted for the purposes of supplying the PCLTF Simulation Model with matrices describing the potential for releases at land disposal facilities. Many of the limitations of this model are common to all models of groundwater contamination. The limitations resulting from the simplifying assumptions used and data availability are discussed separately.

6.4.1 Release Simulation Simplifying Assumptions

Important simplifying assumptions can be divided into three parts:

- weather simulation;
- water balance calculation; and
- contaminant transport.

The modeling process begins with the simulation of weather for a given site. Since we do not understand the underlying relations sufficiently to predict long-term weather trends in a deterministic manner, weather is considered a random event and is simulated using distributions of monthly temperature and precipitation. Because the distributions of monthly temperature are based on 40 years of historical data for each month, the simulated weather will incorporate some features reflecting the interdependence of conditions between successive months. However, no explicit estimate in the inter-month interdependence is included. Consequently, one month is not influenced by the simulated weather for the preceding month.

In addition, weather is simulated on a monthly basis (as opposed to daily or hourly). As a consequence, singular extreme events such as multimonth droughts, excessive rainy periods, and significant storm events have an extremely low probability in the simulation.

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[5] 40 CFR 264, subpart F, Ground-Water Protection: Corrective Action Program.

Weather data are taken from the records of the 300 primary weather stations in the U.S. By virtue of the spread of waste disposal facilities across the nation, weather simulations at some facilities rely on data from relatively distant weather stations. Hence, differences arising from local topography and other geographic features will not be evident.

The impact of the limitations on weather simulation could be significant because this component defines the availability of water to form leachate and subsequently migrate outwards. However, because errors could lie in either direction (excessive or insufficient temperature and precipitation), the average estimates across all facilities are believed to be unbiased.

The water balance calculations are made to determine how much infiltration will occur and what portion of it will emerge as leachate. The relations involved are of a simple bookkeeping nature. In each period, incremental infiltration is calculated and added. Precipitation defines the total amount of water available. A portion will run off, a portion will evaporate and transpire (from plants), and a portion will infiltrate into the top layer. When the top layer becomes saturated, moisture can move on into the next layer, and so on. If a clay layer is involved, the rate of water movement is determined using a hydraulic conductivity curve.

The water balance approach, like the weather simulation, deals with each month as a discrete time step. As such, monthly totals are dealt with rather than individual storm events. This monthly aggregation may overestimate the rate of releases.

The water balance approach implicitly assumes that releases stem from the continual movement of waters into and out of the disposal site. It neglects to consider acute events such as flooding, earthquakes, and human intrusion. Although the importance of flooding and earthquakes is expected to be small, experience suggests that human intrusion may be a significant cause of releases. Given sufficient time, virtually all sites will be disrupted in one fashion or another. The timing and extent of that disruption cannot be predicted. Because human intrusion is not modeled, the current water balance approach underestimates potential failures in the long run.

The third set of simplifying assumptions relates to the way in which the transport of contaminants is modeled. This portion of the Model predicts the movement of the key contaminants in the aquifer once the leachate has entered the saturated zone. A simple three-dimensional transport model is used which considers dispersion, dilution, and soil adsorption. Limiting factors include:

- There is no way to predict where within a site the leachate will breach the liner. As a consequence, the Model assumes failure across the entire site. This simplification creates a wider plume than would be anticipated.

- Of necessity, only representative constituents are considered and interactions among constituents are not accounted for. Synergistic and antagonistic effects influencing toxicity and the rate of transport are not modeled.

- The Model does not address multiple-aquifer contamination. Hence, for those sites where interaquifer communication exists, the model will underestimate both dilution and the extent of the area affected by a release.

- The Model does not consider the possibility of changes in water table elevation which could increase or decrease impacts depending on the direction of change.

- The Model does not consider degradation or chemical interactions of constituents which could reduce leachate levels or create new, more toxic species.

While each of the above considerations may have significant impacts on a specific site, it is difficult to predict their overall impact on the Model output. If any bias exists, it would appear to be that the Model underestimates the potential for releases and overestimates the time it takes for releases to occur. This observation is based on the inability of the model to cover such features as extreme weather conditions, human intrusion, injection well facilities, and interaquifer transfers.

6.4.2 Release Simulation Data Limitations

As with all modeling efforts, the quality of the output from the Release Simulation Model is driven by the quality of the input data used. The major limitations of the key data elements are as follows:

- **Performance of Synthetic Membrane Caps and Liners.** There is a paucity of data on the expected failure rates of synthetic membranes. As a consequence, the values used have little basis in empirical experience. Sensitivity analysis indicates that the assumptions regarding the performance of synthetic membranes can influence the timing of releases, but have little impact on the overall potential for releases to occur.

- **Hydrogeologic Data.** The National Data Base developed for the Release Simulation Model provides data for 7.5 minute grids (cells 7.5 minutes longitude by 7.5 minutes latitude throughout the U.S.). These data have not been explicitly acquired for every grid cell, although numerous data points were analyzed (see Appendix B). Where data are not available for a cell, values based on averages across larger regions are used. Limitations of the data on individual hydrogeologic parameters include:

  -- Seepage Velocity. Aquifer seepage velocity was determined for the major groundwater regions in the country based on the analysis of general conditions described in published reports. In many cases, average values are used for large areas, meaning that the full range of field conditions is not reflected.

- -- Runoff Coefficients. Runoff coefficients were calculated on the basis of hydrologic soil groups and assumed rainfall events in the range of 0-8 inches. Because the soil data are on a large scale, they cannot reflect local patterns in soil types. This could cause significant inaccuracies at individual sites, but no bias is anticipated in the aggregate.

- -- Depth to Groundwater. These data are based on 1,200 values reported in the 1978 EPA surface impoundment survey.[6] If no data point is in the 7.5 minute cell of interest, values are drawn from nearby cells and averaged.

- -- Field Capacity of the Soil. These data are based on field capacity data for soils and the Soil Conservation Service soil map. The large scale of the mapped information prevents consideration of local variations. In addition, the data are for surface soils as opposed to deeper or imported soils. The net effect of these factors is likely to be small in the aggregate. If anything, they may overestimate field capacity because sites are likely to be designed not to hold water, and therefore may have less capacity than local native soils.

- -- Total Dissolved Solids. Data on water quality were taken from the 1978 EPA surface impoundment survey.[7] These data may overestimate water quality because facility siting probably favors areas with low water quality (i.e., a high concentration of total dissolved solids). As a consequence, the Model may underestimate the amount of constituents required to show a significant increase in indicator parameters and will, therefore, predict a Type 1 release too early.

- **Waste Data**. This data base contains a listing of all major toxic constituents and the properties of interest for those constituents. The major limitation on these data are the potential omission of trace or nontoxic constituents with important characteristics and the failure to handle interactions between constituents and between wastes.

Of the above data limitations, most are anticipated to cancel each other in the aggregate. To the extent that the results are biased, it appears that releases may be underestimated.

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[6] U.S. Environmental Protection Agency, "Surface Impoundments and Their Effects on Groundwater Quality in the United States -- A Preliminary Survey," (510/9-78-005), June 1978.

[7] Ibid.

6.5 NEXT STEPS

As indicated in Chapter 1 of this report, the analyses presented here are the result of the third stage of a multi-stage effort undertaken to assess the adequacy of the PCLTF. The current versions of the models presented in this report include modifications that were made based on comments received on previous versions. These modifications, as well as the incorporation of new data collected by EPA, have enhanced the models substantially, increasing their validity. Important next steps in the continued development and use of the models include:

- **Validation and Review**. Although the estimates of the PCLTF balance cannot be empirically verified, the individual components of the Model estimates should continue to be reviewed and validated. For example, the Model results imply that approximately one-half of existing land disposal facilities may currently have groundwater contamination at detectable levels. To the extent that this estimate can be calibrated with field observations of groundwater quality, the Model's estimates of releases can be calibrated.

- **New Data**. The model should incorporate any new or revised data as they become available. As EPA collects data on facility-level characteristics at existing facilities, the distributions reflecting the characteristics should be revised. More important, data on the uses of water located near facilities and on the potentially-exposed population should be updated.

- **Model Enhancements**. Several enhancements of the PCLTF Simulation Model may be particularly useful at this time.

    -- Generators could be added as a potential funding source. This change would require an analysis of the likely ability to recover costs from generators, or at least the identification of the various possible scenarios of generator liability. The addition of generators would increase the scope of the Model, increasing its value as a tool for assessing various RCRA issues.

    -- Because owner/operators are simulated to cover such a large share of costs, an assessment of their ability to isolate themselves from these costs is warranted. The Model may currently overestimate the frequency with which owner/operators will cover costs, thereby underestimating the magnitude of uncovered costs.

    -- A more explicit risk assessment methodology could be implemented to determine possible personal injury damages.

    -- Explicit feedback effects could be implemented in the model. For example, the relationship of liability and business failure could be implemented so that owners/operators could be simulated to practice strategic behavior in the face of large potential liability costs. In general, behavioral response feedbacks of this type can be analyzed in several places within the model.

-- Because the amount of wastes disposed of via land disposal may decrease significantly over the next 10 years, the closure of facilities due to a decrease in demand should be modeled. For decreasing waste scenarios, the model may overestimate the number of operating facilities during some time periods.

-- The estimation of the leachate plume size is currently based on the facility size (in terms of its surface area) and on the distance to the nearest potable well or natural body of water. Additional information such as the amount of leachate released from the facility may improve estimates of the plume size.

- **Sensitivity Analysis and Other RCRA Issues.** The Model should continue to be used through the performance of various sensitivity analyses. These analyses will be useful for examining not only the PCLTF, but also a variety of other RCRA issues. For example, one can examine the implications of alternative monitoring requirements that would increase the ability to detect releases where they occur. Alternatively, the role that banning certain wastes from landfills could play in reducing future releases can be assessed. Also, the cost implications of a policy that would not require a corrective action if no threat were posed to off-site groundwater could be examined. These and other analyses could provide useful insight into various RCRA issues.

In sum, the present stage of PCLTF Model development is sufficiently advanced to yield, we believe, useful estimates of the Fund balance over time. The enhancements discussed here can increase the robustness of the Model and its usefulness for examining a variety of RCRA issues.

POST-CLOSURE LIABILITY TRUST FUND SIMULATION MODEL

VOLUME II: GRAPHS AND TABLES OF MODEL RESULTS

Office of Solid Waste
U.S. Environmental Protection Agency

May 1985

POST-CLOSURE LIABILITY TRUST
FUND SIMULATION MODEL

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PREFACE

This report is the joint effort of two co-contractors, ICF Incorporated and Battelle Pacific Northwest Laboratories. Battelle Pacific Northwest Laboratories developed the Release Simulation Model, a model that predicts facility releases. ICF Incorporated developed the overall Post-Closure Liability Trust Fund Simulation Model, which uses the results of the Release Simulation Model to assess the adequacy of the PCLTF.

This report is organized in three volumes, as follows.

Volume I, "Model Overview and Results," introduces the Post-Closure Liability Trust Fund and presents background information on the RCRA program; describes in general terms the PCLTF Simulation Model and how it is used; presents Model results for five simulations; presents an analysis of the revenue requirements under alternative Fund coverage policies; and presents a discussion of necessary limitations and next steps.

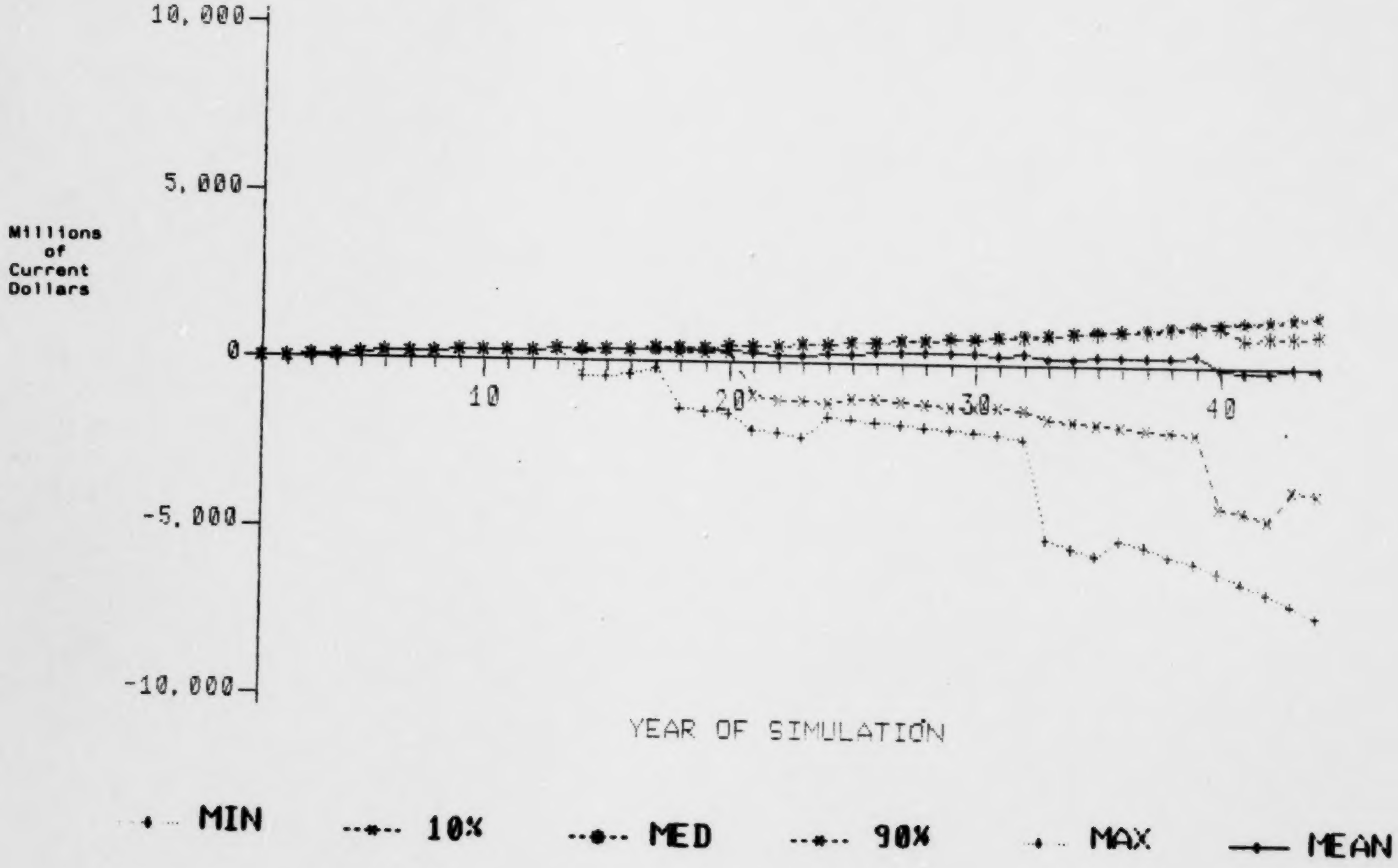
Volume II, "Graphs and Tables of Model Results," presents the graphs and tables that contain the Model results discussed in Volume I. Volume II is separately bound so that the reader can conveniently peruse the Model output when reading the Volume I report.

Volume III, "Appendices," contains four appendices that provide technical detail on various aspects of the Model. Appendix A presents detail on methods, data and assumptions used in the PCLTF Simulation Model. Appendix B provides detail on the Release Simulation Model. Appendix C describes several aspects of model implementation for both the PCLTF Simulation Model and Release Simulation Model, including run characteristics, subroutines, data files, random number generators, and statistical properties of the results. Appendix D reproduces the set of options available to the Model user.

This study was conducted under the guidance of EPA's Office of Solid Waste. Ms. Carole Ansheles, the Project Officer, and her associate Mr. Richard Allan were in charge of this project. Mr. Peter Guerrero was the former Project Officer.

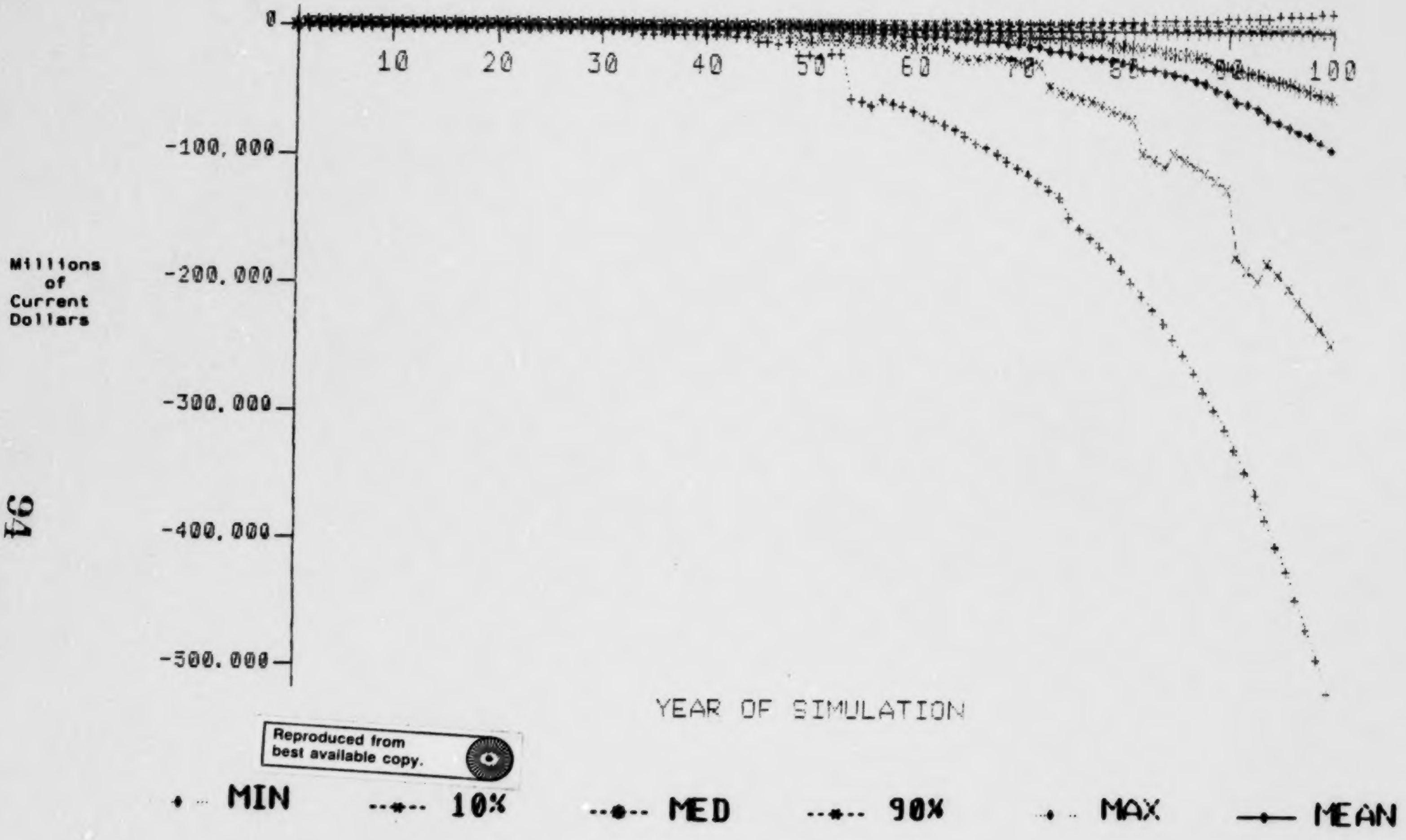
GRAPH I-1

UNOBLIGATED FUND BALANCE IN MILLIONS OF CURRENT DOLLARS
FOR SIMULATION I:
CURRENT PCLTF STATUTE
(Years 1 through 44)



GRAPH I-2

UNOBLIGATED FUND BALANCE IN MILLIONS OF CURRENT DOLLARS
FOR SIMULATION I:
CURRENT PCLTF STATUTE
(Years I through 100)



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CURRENT PCLTF STATUTE

TABLE 1- 1: SUMMARY OF FACILITY POPULATION BY YEAR, PERMIT STATUS, AND QUALIFICATION STATUS
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	OPERATING FACILITIES		CLOSED FACILITIES						
			PERMITTED			NON-PERMITTED			DECONTAMINATED
YEAR	EXISTING	NEW	QUALIFICATION STATUS PENDING	QUALIFIED	UNQUALIFIED	QUALIFICATION STATUS PENDING	QUALIFIED	UNQUALIFIED	
1	938	0	1	0	0	0	0	36	7
2	852	0	6	0	0	0	0	105	18
3	774	0	17	0	0	0	0	162	30
4	685	0	41	0	0	0	0	213	43
5	606	0	67	0	0	0	0	253	56
6	575	3	92	1	0	0	0	253	61
7	547	9	110	3	4	0	0	253	66
8	525	17	117	7	10	0	0	253	70
9	505	25	110	15	26	0	0	253	74
10	486	33	98	24	44	0	0	253	77
11	468	39	88	32	61	0	0	253	81
12	450	45	79	41	75	0	0	253	85
13	433	52	75	49	85	0	0	253	87
14	417	58	71	57	94	0	0	253	90
15	400	63	71	64	102	0	0	253	93
16	386	70	68	71	110	0	0	253	96
17	372	74	65	78	117	0	0	253	98
18	359	78	62	85	124	0	0	253	100
19	347	82	60	91	132	0	0	253	103
20	334	85	56	97	140	0	0	253	105
21	322	88	55	103	146	0	0	253	107
22	311	91	52	108	152	0	0	253	109
23	302	93	48	113	158	0	0	253	111
24	291	95	47	118	164	0	0	253	112
25	281	97	45	123	170	0	0	253	114
26	272	98	42	128	176	0	0	253	116
27	262	100	42	131	181	0	0	253	117
28	253	101	43	135	185	0	0	253	119
29	245	102	41	139	190	0	0	253	120
30	236	103	40	143	195	0	0	253	122
31	228	103	40	147	199	0	0	253	123
32	220	104	38	150	204	0	0	253	125
33	213	105	37	154	209	0	0	253	126
34	205	105	36	157	213	0	0	253	127
35	197	105	36	161	217	0	0	253	129
36	191	106	35	165	221	0	0	253	130
37	186	105	34	168	225	0	0	253	132
38	180	105	34	171	229	0	0	253	133
39	175	104	32	174	233	0	0	253	134
40	169	104	30	178	237	0	0	253	135
41	164	103	29	181	240	0	0	253	136
42	158	102	30	185	242	0	0	253	138
43	152	102	30	188	245	0	0	253	139
44	146	101	31	191	248	0	0	253	140
45	141	101	31	194	251	0	0	253	141
46	138	100	31	196	254	0	0	253	142
47	133	98	29	200	257	0	0	253	143
48	130	97	28	203	260	0	0	253	144
49	125	96	27	207	262	0	0	253	145
50	122	95	26	211	265	0	0	253	146

CURRENT PCLTF STATUTE
(CONTINUED)
TABLE 1- 14 SUMMARY OF FACILITY POPULATION BY YEAR, PERMIT STATUS, AND QUALIFICATION STATUS
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	OPERATING FACILITIES		CLOSED FACILITIES						
			PERMITTED			NON-PERMITTED			DECONTAMINATED
YEAR	EXISTING	NEW	QUALIFICATION STATUS PENDING	QUALIFIED	UNQUALIFIED	QUALIFICATION STATUS PENDING	QUALIFIED	UNQUALIFIED	
51	117	96	26	214	267	0	0	253	147
52	114	97	25	217	269	0	0	253	148
53	110	98	25	220	272	0	0	253	148
54	107	99	24	223	274	0	0	253	149
55	104	100	24	226	276	0	0	253	150
56	101	102	24	228	278	0	0	253	151
57	98	103	23	231	280	0	0	253	151
58	96	104	22	234	282	0	0	253	152
59	93	104	21	237	284	0	0	253	153
60	91	105	20	240	286	0	0	253	153
61	88	105	20	243	287	0	0	253	154
62	86	106	20	245	289	0	0	253	154
63	84	107	20	248	290	0	0	253	155
64	82	108	20	250	292	0	0	253	155
65	80	108	20	253	293	0	0	253	156
66	78	108	19	255	295	0	0	253	156
67	76	108	19	258	296	0	0	253	157
68	73	109	18	260	298	0	0	253	158
69	71	109	19	263	299	0	0	253	158
70	69	110	18	265	301	0	0	253	159
71	67	110	18	268	302	0	0	253	159
72	65	111	18	270	303	0	0	253	160
73	64	111	17	272	305	0	0	253	160
74	63	110	16	274	306	0	0	253	161
75	61	111	16	276	308	0	0	253	161
76	60	111	15	279	309	0	0	253	161
77	58	110	15	281	310	0	0	253	162
78	57	111	14	283	311	0	0	253	162
79	55	111	14	285	312	0	0	253	163
80	54	111	14	287	313	0	0	253	163
81	52	111	15	288	314	0	0	253	164
82	51	111	15	291	315	0	0	253	164
83	50	111	15	293	316	0	0	253	165
84	48	111	15	294	317	0	0	253	165
85	47	111	15	296	318	0	0	253	166
86	46	110	15	298	319	0	0	253	166
87	45	110	14	300	320	0	0	253	167
88	44	109	15	302	321	0	0	253	167
89	43	109	14	304	322	0	0	253	167
90	42	109	14	306	323	0	0	253	168
91	41	109	14	308	324	0	0	253	168
92	40	108	14	310	325	0	0	253	169
93	39	107	14	312	326	0	0	253	169
94	38	106	15	314	327	0	0	253	170
95	37	107	15	316	327	0	0	253	170
96	36	106	16	317	328	0	0	253	170
97	35	106	16	320	329	0	0	253	170
98	34	105	16	322	330	0	0	253	171
99	34	105	14	325	331	0	0	253	171
100	33	104	14	326	332	0	0	253	172

CURRENT PCLTF STATUTE

TABLE 1- 2: SUMMARY PCLTF FINANCIAL STATISTICS
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	UNOBLIGATED BALANCE	BALANCE	NON-INTEREST EXPENDITURES	INTEREST PAYMENTS	TAX REVENUE	INTEREST REVENUE
1	0.0	0.0	0.0	0.0	37.56	1.12
2	38.69	38.69	0.0	0.0	36.62	4.70
3	80.01	80.01	0.0	0.0	35.89	9.33
4	125.23	125.23	0.0	0.0	35.17	12.72
5	173.12	173.12	0.0	0.0	34.47	15.48
6	223.07	223.07	0.0	0.0	8.57	17.09
7	248.73	248.73	0.0	0.0	0.0	16.35
8	265.09	265.09	0.0	0.0	0.0	15.11
9	280.20	280.20	0.0	0.0	0.0	15.63
10	295.83	295.83	0.0	0.0	0.0	16.15
11	311.98	311.98	0.0	0.0	0.0	16.66
12	328.64	328.64	0.0	0.0	0.0	17.16
13	345.80	345.80	20.24	-0.04	0.0	17.29
14	336.67	342.80	4.96	-0.40	0.74	17.80
15	348.10	355.98	2.00	-0.38	1.70	18.52
16	365.02	373.83	0.50	-0.35	1.19	19.43
17	391.20	393.61	48.48	-0.71	0.93	19.88
18	349.73	365.23	0.86	-2.00	1.60	20.64
19	368.89	384.60	23.84	-2.45	1.79	21.65
20	358.36	381.75	66.25	-3.85	1.76	22.10
21	307.63	335.50	55.40	-6.20	2.36	22.30
22	253.09	298.57	5.53	-7.68	3.16	22.85
23	270.53	311.37	18.98	-7.92	3.31	23.51
24	285.62	311.28	1.19	-8.45	3.84	24.37
25	321.69	329.85	0.08	-8.68	3.97	25.58
26	344.01	350.63	2.28	-8.97	3.89	26.88
27	369.04	370.15	0.64	-9.30	3.81	28.23
28	391.32	392.26	35.60	-9.59	3.73	28.99
29	368.06	379.80	27.73	-10.37	4.21	29.30
30	355.36	375.19	35.29	-10.79	4.84	29.34
31	332.19	363.29	0.27	-11.80	5.45	30.42
32	366.80	387.10	113.13	-14.02	5.51	31.73
33	251.25	297.18	9.17	-17.66	5.40	32.75
34	269.97	308.49	1.86	-18.33	5.29	34.13
35	287.19	327.73	28.92	-19.15	5.19	35.41
36	307.91	320.26	2.50	-20.07	5.08	36.46
37	328.75	339.23	12.46	-20.95	4.98	38.11
38	334.87	348.91	5.13	-21.91	4.88	39.70
39	360.16	366.46	303.92	-25.60	4.78	38.63
40	-17.45	80.35	46.29	-35.21	5.56	38.53
41	-68.54	42.95	22.81	-36.89	5.74	38.76
42	-93.37	27.75	6.69	-38.73	5.63	40.13
43	3.70	28.08	57.54	-40.56	5.10	41.01
44	-50.93	-23.91	252.01	-45.36	5.27	39.46
45	-373.24	-276.55	45.52	-53.98	5.69	39.12
46	-443.31	-331.23	86.44	-56.77	6.10	38.36
47	-553.13	-429.99	285.35	-65.00	6.49	37.79
48	-864.69	-736.06	583.20	-87.38	6.85	38.93
49	-1655.84	-1360.85	16.42	-109.98	6.84	40.39
50	-1722.31	-1440.01	343.15	-119.71	6.81	39.90

CURRENT PCLTF STATUTE
(CONTINUED)
TABLE 1- 2: SUMMARY PCLTF FINANCIAL STATISTICS
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	UNOBLIGATED BALANCE	BALANCE	NON-INTEREST EXPENDITURES	INTEREST PAYMENTS	TAX REVENUE	INTEREST REVENUE
51	-2156.46	-1856.16	124.00	-136.96	7.17	40.08
52	-2220.96	-2069.86	35.17	-147.49	7.29	41.40
53	-2366.03	-2203.82	890.43	-171.80	6.93	42.69
54	-3537.98	-3216.43	24.71	-208.71	6.81	44.34
55	-3698.33	-3398.70	125.49	-220.11	7.17	44.54
56	-4030.24	-3692.58	45.27	-233.94	7.66	44.90
57	-3980.59	-3919.22	296.13	-250.06	8.14	44.73
58	-4557.65	-4412.52	459.72	-275.81	8.26	42.23
59	-5345.03	-5097.56	369.28	-309.15	8.99	42.35
60	-6078.47	-5724.63	38.56	-336.13	8.87	43.62
61	-6325.57	-6046.82	36.84	-353.94	9.12	45.02
62	-6527.80	-6383.45	122.18	-372.73	9.24	45.04
63	-6885.33	-6824.07	595.30	-402.08	9.24	42.97
64	-8000.19	-7769.22	84.16	-440.14	9.24	42.49
65	-8494.93	-8241.78	70.95	-464.74	9.24	43.24
66	-8968.11	-8724.97	402.27	-494.91	9.24	42.49
67	-9742.23	-9570.39	70.11	-529.99	9.24	40.75
68	-10291.77	-10120.49	70.72	-558.62	9.24	41.31
69	-10874.64	-10699.26	69.77	-588.76	9.60	41.95
70	-11372.62	-11306.21	293.03	-621.20	9.36	39.22
71	-12305.81	-12171.85	78.74	-659.71	9.60	37.63
72	-13002.11	-12863.04	2124.21	-734.02	9.72	37.99
73	-16438.09	-15673.53	90.86	-839.20	10.09	38.32
74	-17277.93	-16555.14	344.03	-888.90	10.21	38.27
75	-18568.67	-17739.57	917.38	-959.79	10.21	37.90
76	-19984.80	-19568.60	108.11	-1037.98	10.21	38.13
77	-21100.94	-20666.31	111.49	-1094.25	10.21	38.35
78	-22191.99	-21823.46	379.94	-1158.51	10.21	38.52
79	-23498.86	-23313.16	221.16	-1231.35	10.21	38.39
80	-24940.32	-24717.04	135.36	-1300.88	10.21	37.95
81	-26340.33	-26105.10	1722.50	-1401.44	10.21	37.67
82	-29818.22	-29181.11	146.40	-1528.05	10.57	37.24
83	-31439.26	-30807.70	164.16	-1610.95	10.70	36.86
84	-33195.64	-32535.20	157.15	-1698.86	10.70	36.79
85	-34491.00	-34343.66	165.12	-1791.18	10.70	36.74
86	-36405.84	-36252.48	275.40	-1890.17	11.06	36.29
87	-38557.65	-38370.66	185.77	-1996.54	11.55	36.33
88	-40702.23	-40505.02	2367.05	-2146.87	11.67	36.53
89	-45836.76	-44970.68	229.38	-2334.73	11.67	37.11
90	-48362.30	-47485.94	2689.42	-2510.17	11.67	37.70
91	-54299.16	-52636.08	239.30	-2726.97	11.67	38.22
92	-56547.66	-55552.38	600.63	-2882.47	11.67	38.16
93	-60124.44	-58985.56	4083.93	-3111.96	11.67	26.63
94	-67648.06	-66142.87	263.10	-3400.91	12.40	22.87
95	-71335.00	-69771.31	277.04	-3586.01	12.64	22.65
96	-75104.50	-73598.94	302.28	-3781.66	12.64	22.62
97	-77912.69	-77647.56	302.58	-3988.20	12.64	22.68
98	-82180.62	-81902.87	367.55	-4206.46	12.64	22.71
99	-86747.12	-86441.37	802.63	-4446.13	13.00	22.69
100	-92112.44	-91654.25	356.79	-4703.71	13.49	22.85

CURRENT PCLTF STATUTE

TABLE 1- 3: SUMMARY OF PCLTF BALANCE
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	FUND BALANCE					UNOBLIGATED FUND BALANCE				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
1	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
2	38.69	38.69	(0.0)	38.69	38.69	38.69	38.69	(0.0)	38.69	38.69
3	80.01	80.01	(0.0)	80.01	80.01	80.01	80.01	(0.0)	80.01	80.01
4	125.23	125.23	(0.0)	125.23	125.23	125.23	125.23	(0.0)	125.23	125.23
5	173.12	173.12	(0.0)	173.12	173.12	173.12	173.12	(0.0)	173.12	173.12
6	223.07	223.07	(0.0)	223.07	223.07	223.07	223.07	(0.0)	223.07	223.07
7	248.73	248.73	(0.0)	248.73	248.73	248.73	248.73	(0.0)	248.73	248.73
8	265.09	265.09	(0.0)	265.09	265.09	265.09	265.09	(0.0)	265.09	265.09
9	280.20	280.20	(0.0)	280.20	280.20	280.20	280.20	(0.0)	280.20	280.20
10	295.83	295.83	(0.0)	295.83	295.83	295.83	295.83	(0.0)	295.83	295.83
11	311.98	311.98	(0.0)	311.98	311.98	311.98	311.98	(0.0)	311.98	311.98
12	328.64	328.64	(0.0)	328.64	328.64	328.64	328.64	(0.0)	328.64	328.64
13	345.80	345.80	(0.0)	345.80	345.80	345.80	345.80	(0.0)	345.80	345.80
14	363.43	342.80	(20.6)	363.43	363.43	363.43	336.67	(26.8)	363.43	363.43
15	381.97	355.98	(21.4)	381.97	381.97	381.97	348.10	(27.9)	381.97	381.97
16	374.84	373.83	(21.3)	401.45	401.45	366.93	365.02	(28.0)	401.45	401.45
17	391.64	393.61	(21.4)	421.92	421.92	382.72	391.20	(21.7)	421.92	421.92
18	304.52	365.23	(52.7)	443.44	443.44	304.52	349.73	(66.3)	443.44	443.44
19	320.05	384.60	(54.4)	466.05	466.05	320.05	368.89	(68.4)	466.05	466.05
20	336.37	381.75	(67.9)	489.82	489.82	336.37	358.36	(84.2)	489.82	489.82
21	-808.49	335.50	(94.7)	514.61	514.80	-1012.13	307.63	(112.0)	514.61	514.80
22	-944.80	298.57	(107.5)	539.49	541.05	-1125.29	253.09	(129.6)	539.49	541.05
23	-974.51	311.37	(111.4)	566.90	568.65	-1150.00	270.53	(131.8)	566.83	568.65
24	-999.79	311.28	(116.8)	595.81	597.65	-1184.23	285.62	(125.3)	595.81	597.65
25	-1026.85	329.85	(121.1)	626.13	628.13	-1026.85	321.69	(122.5)	626.12	628.13
26	-1055.77	350.63	(125.8)	658.07	660.16	-1055.77	344.01	(126.8)	658.05	660.16
27	-1140.88	370.15	(131.5)	691.61	693.83	-1157.02	369.04	(131.8)	691.61	693.83
28	-1176.54	392.26	(136.6)	725.85	729.21	-1193.32	391.32	(136.9)	724.85	729.21
29	-1214.47	379.80	(143.6)	760.87	766.40	-1231.93	368.06	(146.0)	759.96	766.40
30	-1254.78	375.19	(149.2)	798.50	805.49	-1254.78	355.36	(152.2)	798.50	805.49
31	-1297.58	363.29	(157.8)	837.08	846.57	-1297.58	332.19	(162.6)	837.08	846.57
32	-1342.98	387.10	(164.2)	879.77	889.74	-1342.98	366.80	(167.1)	879.77	889.74
33	-1606.59	297.18	(227.8)	913.55	934.82	-1606.59	251.25	(251.3)	913.53	934.73
34	-1668.70	308.49	(237.6)	959.72	982.02	-1668.74	269.97	(260.7)	959.58	981.79
35	-1734.64	327.73	(248.4)	994.36	1030.94	-1734.79	287.19	(272.5)	991.82	1030.84
36	-1804.53	320.26	(262.1)	1041.63	1082.84	-1804.87	307.91	(263.0)	1037.14	1082.53
37	-1878.60	339.23	(274.2)	1089.03	1134.27	-1879.15	328.75	(275.3)	1080.35	1132.71
38	-1957.10	348.91	(286.7)	1124.42	1190.03	-1957.87	334.87	(287.8)	1122.71	1188.19
39	-2040.79	366.46	(300.2)	1178.95	1247.43	-2041.97	360.16	(300.1)	1176.72	1245.46
40	-3161.21	80.35	(355.1)	1201.43	1304.78	-4176.55	-17.45	(388.5)	1198.99	1302.23
41	-3312.59	42.95	(368.2)	894.31	1366.15	-4366.26	-68.54	(402.3)	860.58	1363.41
42	-3472.92	27.75	(385.0)	935.83	1432.06	-4561.30	-93.37	(420.6)	899.23	1429.27
43	-3640.65	28.08	(403.4)	978.84	1501.26	-3647.79	3.70	(402.6)	939.59	1497.98
44	-3818.00	-23.91	(419.1)	986.49	1573.19	-3825.31	-50.93	(418.9)	981.41	1569.14
45	-4005.44	-276.55	(504.4)	693.67	1647.93	-4012.83	-373.24	(530.4)	611.10	1643.20
46	-4203.46	-331.23	(526.8)	642.04	1725.70	-4211.52	-443.31	(553.5)	600.87	1720.46
47	-4412.69	-429.99	(548.6)	630.02	1806.90	-4421.43	-553.13	(576.6)	450.77	1801.09
48	-5161.62	-736.06	(620.7)	236.39	1891.29	-5170.24	-864.69	(655.5)	230.16	1884.86
49	-7739.46	-1360.85	(849.0)	240.30	1967.68	-10227.16	-1655.84	(988.3)	233.45	1959.37
50	-8132.62	-1440.01	(892.2)	243.68	2057.93	-10721.59	-1722.31	(1038.4)	236.14	2049.08

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CURRENT PCLTF STATUTE
(CONTINUED)
TABLE  1- 3: SUMMARY OF PCLTF BALANCE
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS
                                                                                          UNOBLIGATED FUND BALANCE
                                      FUND BALANCE
YEAR       10TH %       MEAN   (STD.ERR)     MEDIAN     90TH %          10TH %       MEAN   (STD.ERR)     MEDIAN     90TH %
----      -------       ----   ---------     ------     ------         -------       ----   ---------     ------     ------
 51      -8930.26   -1856.16  (   947.1)     192.95    2151.97        -9056.34   -2156.46  (  1079.1)     182.54    2142.51
 52      -9386.53   -2069.86  (  1014.7)     204.65    2234.00        -9533.77   -2220.96  (  1031.8)     193.48    2215.11
 53      -9863.50   -2203.82  (  1067.7)     215.91    2247.30       -10017.02   -2366.03  (  1085.7)     204.17    2229.65
 54     -10365.73   -3216.43  (  1803.2)     215.17    2338.81       -10524.13   -3537.98  (  2041.4)     202.38    2317.37
 55     -10894.51   -3398.70  (  1896.1)     211.02    2438.72       -10907.09   -3698.33  (  2139.7)     197.40    2416.29
 56     -11451.30   -3692.58  (  1991.0)    -633.23    2542.81       -11464.79   -4030.24  (  2244.1)    -667.27    2523.36
 57     -12037.50   -3919.22  (  2091.2)    -687.84    2652.80       -12051.91   -3980.59  (  2092.0)    -725.67    2634.44
 58     -12657.39   -4412.52  (  2189.3)   -1245.70    2764.55       -12673.58   -4557.65  (  2191.9)   -1263.94    2744.93
 59     -13309.70   -5097.56  (  2291.6)   -1645.83    2839.20       -13511.67   -5345.03  (  2306.4)   -1685.38    2816.88
 60     -13996.02   -5724.63  (  2410.6)   -2051.50    2957.00       -14210.32   -6078.47  (  2434.5)   -2429.97    2932.94
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 61     -14718.86   -6046.82  (  2533.8)   -2179.80    3079.36       -14944.61   -6325.57  (  2557.5)   -2216.75    3054.44
 62     -15480.13   -6383.45  (  2663.7)   -2316.44    3206.82       -15501.86   -6527.80  (  2674.8)   -2353.54    3180.54
 63     -16280.83   -6824.07  (  2790.4)   -2462.46    3208.43       -16303.71   -6885.33  (  2788.9)   -2499.59    3162.00
 64     -17662.33   -7769.22  (  2950.7)   -2617.98    2749.01       -21646.57   -8000.19  (  2968.0)   -2657.04    2709.52
 65     -18716.05   -8241.78  (  3118.6)   -2783.60    2834.44       -22890.36   -8494.93  (  3141.4)   -2824.72    2789.48
 66     -19782.21   -8724.97  (  3278.2)   -2960.77    2781.90       -24140.10   -8968.11  (  3304.9)   -3004.14    2689.61
 67     -20908.52   -9570.39  (  3421.7)   -4449.10    2751.72       -21040.53   -9742.23  (  3425.1)   -4493.14    2715.47
 68     -22097.83  -10120.49  (  3596.6)   -4713.07    2848.25       -22219.99  -10291.77  (  3594.4)   -4759.55    2809.90
 69     -23351.95  -10699.26  (  3780.9)   -4993.21    2947.95       -23478.93  -10874.64  (  3778.6)   -5041.41    2907.59
 70     -24649.92  -11306.21  (  3974.6)   -5290.33    3050.16       -24773.98  -11372.62  (  3975.8)   -5340.54    3007.66
--------------------------------------------------------------------------------------------------------------------------
 71     -26017.04  -12171.85  (  4155.6)   -5603.55    2623.67       -26137.10  -12305.81  (  4152.4)   -5655.74    2524.52
 72     -27463.41  -12863.04  (  4368.5)   -5935.19    2639.89       -27580.75  -13002.11  (  4365.2)   -5989.28    2536.09
 73     -45198.48  -15673.53  (  5065.8)   -6286.15    2646.91       -45321.46  -16438.09  (  5351.3)   -6342.02    2536.65
 74     -47634.94  -16555.14  (  5324.9)   -6658.64    2635.26       -47763.65  -17277.93  (  5627.0)   -6717.12    2514.35
 75     -50201.49  -17739.57  (  5773.4)   -7053.80    2629.77       -50336.08  -18568.67  (  6127.3)   -7115.27    2501.76
 76     -52907.57  -19568.60  (  6099.3)   -7472.35    2617.86       -53048.96  -19984.80  (  6185.5)   -7537.08    2484.00
 77     -55791.86  -20666.31  (  6411.6)   -7915.38    2599.35       -55949.75  -21100.94  (  6501.5)   -7983.23    2463.97
 78     -58826.58  -21823.46  (  6741.1)   -8385.07    2575.06       -59000.68  -22191.99  (  6776.3)   -8456.13    2434.41
 79     -62025.45  -23313.16  (  7069.4)  -11969.17    2542.79       -62216.30  -23498.86  (  7068.4)  -12139.31    2396.73
 80     -65398.73  -24717.04  (  7448.9)  -12745.07    2111.61       -65596.87  -24940.32  (  7453.2)  -12903.90    1843.76
--------------------------------------------------------------------------------------------------------------------------
 81     -68953.81  -26105.10  (  7831.4)  -13567.91    1917.86       -69161.37  -26340.33  (  7835.8)  -13735.08    1793.03
 82     -81291.31  -29181.11  (  8436.9)  -14440.94    1852.18       -95300.87  -29818.22  (  8562.9)  -14614.83    1768.71
 83     -85549.69  -30807.70  (  8869.1)  -15371.49    1839.08      -100123.00  -31439.26  (  8994.6)  -15554.17    1745.66
 84     -90054.69  -32535.20  (  9323.0)  -16354.87    1820.15      -105221.44  -33195.64  (  9453.0)  -16545.81    1717.46
 85     -94795.81  -34343.66  (  9800.3)  -17397.70    1794.45       -94933.69  -34491.00  (  9802.5)  -17597.25    1689.73
 86     -99786.00  -36252.48  ( 10302.1)  -18502.82    1763.20       -99937.37  -36405.84  ( 10304.3)  -18709.67    1653.77
 87    -105035.69  -38370.66  ( 10817.1)  -19673.84    1734.08      -105192.94  -38557.65  ( 10815.8)  -19889.34    1622.58
 88    -110558.19  -40505.02  ( 11370.9)  -20912.55    1698.10      -110720.81  -40702.23  ( 11369.6)  -21136.30    1584.79
 89    -116353.06  -44970.68  ( 11886.5)  -26731.88    1654.70      -116516.12  -45836.76  ( 11903.3)  -27165.82    1539.26
 90    -122450.56  -47485.94  ( 12496.9)  -28267.92    1600.49      -122614.50  -48362.30  ( 12519.5)  -28720.15    1479.04
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 91    -154811.75  -52636.08  ( 13587.8)  -29901.91    1535.39      -176686.06  -54299.16  ( 13823.9)  -30376.69    1407.06
 92    -162904.19  -55552.38  ( 14283.2)  -31929.09    1459.80      -185661.87  -56547.66  ( 14514.7)  -32206.83    1324.07
 93    -171415.94  -58985.56  ( 15017.2)  -33775.71    1374.21      -195091.69  -60124.44  ( 15258.6)  -34071.15    1231.82
 94    -180370.56  -66142.87  ( 15642.7)  -37646.77    1100.64      -180573.75  -67648.06  ( 15792.9)  -37765.42     937.64
 95    -189791.81  -69771.31  ( 16444.1)  -39692.20     962.67      -190002.81  -71335.00  ( 16600.1)  -39816.15     791.18
 96    -199688.56  -73598.94  ( 17285.9)  -41848.27     792.01      -199903.87  -75104.50  ( 17443.6)  -41977.82     607.00
 97    -210101.19  -77647.56  ( 18169.8)  -44121.41     612.10      -210321.50  -77912.69  ( 18173.0)  -44257.17     416.17
 98    -221054.94  -81902.87  ( 19102.7)  -46517.19     413.65      -221280.12  -82180.62  ( 19106.6)  -46659.18     206.52
 99    -232578.12  -86441.37  ( 20078.1)  -49042.31     195.40      -232813.19  -86747.12  ( 20081.4)  -49190.80     -17.68
100    -244700.69  -91654.25  ( 21149.4)  -51703.97     -33.19      -244945.75  -92112.44  ( 21166.8)  -51859.14    -255.23
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CURRENT PCLTF STATUTE

TABLE 1- 4: SUMMARY OF PCLTF TAX REVENUES, AND TOTAL MONITORING, CARE, RESPONSE, AND CLAIMS EXPENDITURES
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	TAX REVENUES					MONITORING, CARE, RESPONSE, AND CLAIMS PCLTF EXPENDITURES				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
1	37.56	37.56	(0.0)	37.56	37.56	0.0	0.0	(0.0)	0.0	0.0
2	36.62	36.62	(0.0)	36.62	36.62	0.0	0.0	(0.0)	0.0	0.0
3	35.89	35.89	(0.0)	35.89	35.89	0.0	0.0	(0.0)	0.0	0.0
4	35.17	35.17	(0.0)	35.17	35.17	0.0	0.0	(0.0)	0.0	0.0
5	34.47	34.47	(0.0)	34.47	34.47	0.0	0.0	(0.0)	0.0	0.0
6	8.57	8.57	(0.0)	8.57	8.57	0.0	0.0	(0.0)	0.0	0.0
7	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
8	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
9	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
10	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
11	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
12	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
13	0.0	0.0	(0.0)	0.0	0.0	0.0	20.24	(20.2)	0.0	0.0
14	0.0	0.74	(0.7)	0.0	0.0	0.0	4.96	(5.0)	0.0	0.0
15	0.0	1.70	(1.2)	0.0	0.0	0.0	2.00	(1.1)	0.0	10.99
16	0.0	1.19	(1.0)	0.0	0.0	0.0	0.50	(0.4)	0.0	1.33
17	0.0	0.93	(0.9)	0.0	0.0	0.0	48.48	(47.7)	0.0	0.0
18	0.0	1.60	(1.1)	0.0	0.0	0.0	0.86	(0.7)	0.0	1.24
19	0.0	1.79	(1.2)	0.0	0.0	0.0	23.84	(22.3)	0.0	22.48
20	0.0	1.76	(1.2)	0.0	0.0	0.0	66.25	(65.6)	0.0	4.28
21	0.0	2.36	(1.3)	0.0	18.62	0.0	55.40	(49.1)	0.0	2.76
22	0.0	3.16	(1.5)	0.0	24.45	0.0	5.53	(4.4)	0.0	6.71
23	0.0	3.31	(1.6)	0.0	23.96	0.0	18.98	(18.9)	0.0	0.0
24	0.0	3.84	(1.6)	0.0	23.48	0.0	1.19	(1.0)	0.0	1.19
25	0.0	3.97	(1.6)	0.0	23.01	0.0	0.08	(0.1)	0.0	0.0
26	0.0	3.89	(1.6)	0.0	22.55	0.0	2.28	(1.8)	0.0	2.76
27	0.0	3.81	(1.6)	0.0	22.10	0.0	0.64	(0.3)	0.0	3.08
28	0.0	3.73	(1.5)	0.0	21.66	0.0	35.60	(35.6)	0.0	0.0
29	0.0	4.21	(1.6)	0.0	21.23	0.0	27.73	(26.5)	0.0	1.25
30	0.0	4.84	(1.6)	0.0	20.80	0.0	35.29	(32.1)	0.0	34.71
31	0.0	5.45	(1.7)	0.0	20.39	0.0	0.27	(0.2)	0.0	0.14
32	0.0	5.51	(1.7)	0.0	19.98	0.0	113.13	(99.1)	0.17	2.78
33	0.0	5.40	(1.7)	0.0	19.58	0.13	9.17	(6.2)	0.32	11.26
34	0.0	5.29	(1.6)	0.0	19.19	0.34	1.86	(0.7)	0.68	7.12
35	0.0	5.19	(1.6)	0.0	18.80	0.58	28.92	(21.7)	1.20	43.15
36	0.0	5.08	(1.6)	0.0	18.43	0.96	2.50	(0.4)	1.76	4.86
37	0.0	4.98	(1.5)	0.0	18.06	1.22	12.46	(8.0)	2.06	28.77
38	0.0	4.88	(1.5)	0.0	17.70	1.72	5.13	(1.9)	2.64	7.07
39	0.0	4.78	(1.5)	0.0	17.34	2.29	303.92	(205.3)	3.19	59.76
40	0.0	5.56	(1.5)	0.0	17.00	2.55	46.29	(30.5)	4.17	9.31
41	0.0	5.74	(1.5)	0.0	16.66	3.20	22.81	(12.7)	4.79	57.53
42	0.0	5.63	(1.5)	0.0	16.32	3.77	6.69	(0.7)	5.41	10.78
43	0.0	5.10	(1.4)	0.0	16.00	4.32	57.54	(47.9)	5.85	17.85
44	0.0	5.27	(1.4)	0.0	15.68	4.76	252.01	(150.2)	7.39	903.90
45	0.0	5.69	(1.4)	0.0	15.36	5.37	45.52	(34.0)	7.46	50.53
46	0.0	6.10	(1.4)	0.0	15.06	6.12	86.44	(62.6)	9.29	61.79
47	0.0	6.49	(1.4)	0.0	14.75	7.26	285.35	(271.1)	10.00	34.36
48	0.0	6.85	(1.3)	0.0	14.46	8.25	583.20	(557.8)	12.00	94.03
49	0.0	6.84	(1.3)	0.0	14.17	8.85	16.42	(2.2)	11.68	38.29
50	0.0	6.81	(1.3)	0.0	14.10	9.54	343.15	(171.9)	16.23	1996.69

CURRENT PCLTF STATUTE
(CONTINUED)
TABLE 1- 4: SUMMARY OF PCLTF TAX REVENUES, AND TOTAL MONITORING, CARE, RESPONSE, AND CLAIMS EXPENDITURES
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	TAX REVENUES					MONITORING, CARE, RESPONSE, AND CLAIMS PCLTF EXPENDITURES				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
51	0.0	7.17	(1.3)	10.57	14.10	10.28	124.00	(100.7)	16.91	65.15
52	0.0	7.29	(1.3)	14.10	14.10	11.39	35.17	(9.5)	19.58	81.97
53	0.0	6.93	(1.3)	3.52	14.10	12.18	890.43	(866.0)	17.55	85.30
54	0.0	6.81	(1.3)	0.0	14.10	12.94	24.71	(3.2)	18.19	53.93
55	0.0	7.17	(1.3)	10.57	14.10	14.75	125.49	(90.3)	19.94	110.72
56	0.0	7.66	(1.3)	10.57	14.10	16.26	45.27	(12.9)	21.07	62.44
57	0.0	8.14	(1.3)	14.10	14.10	18.37	296.13	(229.7)	23.14	88.57
58	0.0	8.26	(1.3)	14.10	14.10	18.80	459.72	(426.8)	24.75	75.58
59	0.0	8.99	(1.2)	14.10	14.10	19.78	369.28	(329.7)	26.49	96.77
60	0.0	8.87	(1.3)	14.10	14.10	20.78	38.56	(4.2)	27.92	74.43
61	0.0	9.12	(1.3)	14.10	14.10	21.72	36.84	(3.3)	29.17	73.54
62	0.0	9.24	(1.3)	14.10	14.10	23.10	122.18	(73.9)	32.75	81.96
63	0.0	9.24	(1.3)	14.10	14.10	23.58	595.30	(449.4)	37.23	1425.50
64	0.0	9.24	(1.3)	14.10	14.10	25.04	84.16	(22.8)	43.86	170.46
65	0.0	9.24	(1.3)	14.10	14.10	28.75	70.95	(10.0)	44.02	176.84
66	0.0	9.24	(1.3)	14.10	14.10	30.46	402.27	(263.1)	49.45	1026.63
67	0.0	9.24	(1.3)	14.10	14.10	35.00	70.11	(8.9)	52.89	134.81
68	0.0	9.24	(1.3)	14.10	14.10	35.64	70.72	(7.8)	52.77	122.29
69	0.0	9.60	(1.2)	14.10	14.10	38.81	69.77	(7.4)	49.92	121.50
70	0.0	9.36	(1.2)	14.10	14.10	40.90	293.03	(214.7)	63.13	130.39
71	0.0	9.60	(1.2)	14.10	14.10	42.70	78.74	(7.9)	55.58	130.93
72	0.0	9.72	(1.2)	14.10	14.10	46.84	2124.21	(2037.0)	63.95	190.29
73	0.0	10.09	(1.2)	14.10	14.10	50.02	90.86	(8.5)	68.76	143.91
74	0.0	10.21	(1.2)	14.10	14.10	53.38	344.03	(226.7)	80.76	284.28
75	0.0	10.21	(1.2)	14.10	14.10	55.63	917.38	(815.9)	79.49	201.63
76	0.0	10.21	(1.2)	14.10	14.10	58.14	108.11	(9.7)	86.83	196.67
77	0.0	10.21	(1.2)	14.10	14.10	60.03	111.49	(9.9)	89.39	199.94
78	0.0	10.21	(1.2)	14.10	14.10	63.48	379.94	(264.8)	95.68	209.15
79	0.0	10.21	(1.2)	14.10	14.10	74.51	221.16	(76.3)	100.48	550.44
80	0.0	10.21	(1.2)	14.10	14.10	70.23	135.36	(12.6)	105.78	249.57
81	0.0	10.21	(1.2)	14.10	14.10	74.32	1722.50	(1581.8)	111.89	303.32
82	0.0	10.57	(1.1)	14.10	14.10	77.68	146.40	(13.4)	117.63	265.82
83	0.0	10.70	(1.1)	14.10	14.10	83.04	164.16	(16.7)	118.40	335.15
84	0.0	10.70	(1.1)	14.10	14.10	87.16	157.15	(13.5)	124.13	260.17
85	0.0	10.70	(1.1)	14.10	14.10	91.66	165.12	(14.1)	130.87	273.45
86	0.0	11.06	(1.1)	14.10	14.10	97.15	275.40	(76.4)	136.11	425.09
87	0.0	11.55	(1.0)	14.10	14.10	110.86	185.77	(16.4)	138.87	338.78
88	0.0	11.67	(1.0)	14.10	14.10	115.21	2367.05	(1495.6)	160.07	1084.45
89	0.0	11.67	(1.0)	14.10	14.10	127.52	229.38	(29.3)	153.02	425.49
90	0.0	11.67	(1.0)	14.10	14.10	128.44	2689.42	(2469.6)	162.24	440.48
91	0.0	11.67	(1.0)	14.10	14.10	134.53	239.30	(21.6)	172.17	398.87
92	0.0	11.67	(1.0)	14.10	14.10	141.15	600.63	(327.2)	214.40	478.25
93	0.0	11.67	(1.0)	14.10	14.10	149.41	4083.93	(3827.2)	214.28	427.01
94	0.0	12.40	(0.8)	14.10	14.10	151.93	263.10	(21.4)	215.12	428.98
95	0.0	12.64	(0.8)	14.10	14.10	168.64	277.04	(21.6)	227.80	445.67
96	0.0	12.64	(0.8)	14.10	14.10	172.88	302.28	(25.1)	238.77	476.74
97	0.0	12.64	(0.8)	14.10	14.10	180.23	302.58	(24.9)	234.60	499.17
98	0.0	12.64	(0.8)	14.10	14.10	188.44	367.55	(47.5)	259.01	653.04
99	10.57	13.00	(0.7)	14.10	14.10	196.65	802.63	(259.5)	289.82	3291.23
100	14.10	13.49	(0.5)	14.10	14.10	208.91	356.79	(34.4)	266.65	552.16

TABLE 1- 5: SUMMARY OF PCLTF INTEREST REVENUES AND PAYMENTS
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	INTEREST REVENUES					INTEREST PAYMENTS				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
1	1.12	1.12	(0.0)	1.12	1.12	0.0	0.0	(0.0)	0.0	0.0
2	4.70	4.70	(0.0)	4.70	4.70	0.0	0.0	(0.0)	0.0	0.0
3	9.33	9.33	(0.0)	9.33	9.33	0.0	0.0	(0.0)	0.0	0.0
4	12.72	12.72	(0.0)	12.72	12.72	0.0	0.0	(0.0)	0.0	0.0
5	15.48	15.48	(0.0)	15.48	15.48	0.0	0.0	(0.0)	0.0	0.0
6	17.09	17.09	(0.0)	17.09	17.09	0.0	0.0	(0.0)	0.0	0.0
7	16.35	16.35	(0.0)	16.35	16.35	0.0	0.0	(0.0)	0.0	0.0
8	15.11	15.11	(0.0)	15.11	15.11	0.0	0.0	(0.0)	0.0	0.0
9	15.63	15.63	(0.0)	15.63	15.63	0.0	0.0	(0.0)	0.0	0.0
10	16.15	16.15	(0.0)	16.15	16.15	0.0	0.0	(0.0)	0.0	0.0
11	16.66	16.66	(0.0)	16.66	16.66	0.0	0.0	(0.0)	0.0	0.0
12	17.16	17.16	(0.0)	17.16	17.16	0.0	0.0	(0.0)	0.0	0.0
13	17.64	17.29	(0.3)	17.64	17.64	0.0	-0.04	(0.0)	0.0	0.0
14	18.53	17.80	(0.6)	18.53	18.53	0.0	-0.40	(0.4)	0.0	0.0
15	18.99	18.52	(0.7)	19.48	19.48	0.0	-0.38	(0.4)	0.0	0.0
16	19.07	19.43	(0.7)	20.47	20.47	0.0	-0.35	(0.3)	0.0	0.0
17	14.78	19.88	(0.9)	21.52	21.52	0.0	-0.71	(0.5)	0.0	0.0
18	15.53	20.64	(1.1)	22.62	22.62	0.0	-2.00	(1.7)	0.0	0.0
19	16.32	21.65	(1.1)	23.77	23.77	0.0	-2.45	(1.9)	0.0	0.0
20	5.81	22.10	(1.3)	24.97	24.98	-18.16	-3.85	(2.3)	0.0	0.0
21	0.0	22.30	(1.6)	26.21	26.25	-40.76	-6.20	(3.4)	0.0	0.0
22	0.0	22.85	(1.8)	27.51	27.59	-47.96	-7.68	(3.7)	0.0	0.0
23	0.0	23.51	(2.0)	28.91	29.00	-49.24	-7.92	(3.9)	0.0	0.0
24	0.0	24.37	(2.2)	30.39	30.48	-50.54	-8.45	(4.0)	0.0	0.0
25	0.0	25.58	(2.3)	31.93	32.03	-51.93	-8.68	(4.1)	0.0	0.0
26	0.0	26.88	(2.4)	33.56	33.67	-54.42	-8.97	(4.3)	0.0	0.0
27	0.0	28.23	(2.5)	35.24	35.39	-57.76	-9.30	(4.4)	0.0	0.0
28	0.0	28.99	(2.6)	36.92	37.19	-59.59	-9.59	(4.6)	0.0	0.0
29	0.0	29.30	(2.9)	38.75	39.09	-61.53	-10.37	(4.7)	0.0	0.0
30	0.0	29.34	(3.3)	40.62	41.08	-63.60	-10.79	(4.9)	0.0	0.0
31	0.0	30.42	(3.6)	42.69	43.17	-65.79	-11.80	(5.1)	0.0	0.0
32	0.0	31.73	(3.7)	44.33	45.37	-78.57	-14.02	(6.2)	0.0	0.0
33	0.0	32.75	(3.9)	46.58	47.67	-81.57	-17.66	(8.8)	0.0	0.0
34	0.0	34.13	(4.1)	48.80	50.04	-84.75	-18.33	(9.2)	0.0	0.0
35	0.0	35.41	(4.2)	50.58	52.57	-88.12	-19.15	(9.7)	0.0	0.0
36	0.0	36.46	(4.4)	53.09	55.18	-91.70	-20.07	(10.3)	0.0	0.0
37	0.0	38.11	(4.6)	54.63	57.81	-95.49	-20.95	(10.8)	0.0	0.0
38	0.0	39.70	(4.8)	57.29	60.62	-99.51	-21.91	(11.3)	0.0	0.0
39	0.0	38.63	(5.2)	58.39	63.40	-103.79	-25.60	(11.8)	0.0	0.0
40	0.0	38.53	(5.5)	50.77	66.48	-161.04	-35.21	(14.0)	0.0	0.0
41	0.0	38.76	(5.7)	45.53	69.59	-168.78	-36.89	(14.7)	0.0	0.0
42	0.0	40.13	(5.9)	47.64	72.96	-176.94	-38.73	(15.5)	0.0	0.0
43	0.0	41.01	(6.0)	48.53	76.48	-185.52	-40.56	(16.2)	0.0	0.0
44	0.0	39.46	(6.4)	50.19	80.14	-194.58	-45.36	(18.2)	0.0	0.0
45	0.0	39.12	(6.7)	33.74	83.93	-204.16	-53.98	(21.5)	0.0	0.0
46	0.0	38.36	(7.0)	30.76	87.88	-214.28	-56.77	(22.6)	0.0	0.0
47	0.0	37.79	(7.5)	11.69	92.01	-224.97	-65.00	(23.6)	0.0	0.0
48	0.0	38.93	(7.8)	11.90	95.77	-310.51	-87.38	(28.0)	0.0	0.0
49	0.0	40.39	(8.1)	12.09	100.16	-394.68	-109.98	(38.6)	0.0	0.0
50	0.0	39.90	(8.3)	12.25	104.75	-421.88	-119.71	(40.7)	0.0	0.0

CURRENT PCLTF STATUTE
(CONTINUED)
TABLE 1- 5: SUMMARY OF PCLTF INTEREST REVENUES AND PAYMENTS
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	INTEREST REVENUES					INTEREST PAYMENTS				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
51	0.0	40.08	(8.7)	9.88	109.53	-455.46	-136.96	(43.5)	0.0	0.0
52	0.0	41.40	(9.0)	10.45	112.24	-478.68	-147.49	(46.5)	0.0	0.0
53	0.0	42.69	(9.3)	10.86	114.18	-503.02	-171.80	(61.0)	0.0	0.0
54	0.0	44.34	(9.6)	10.69	118.92	-528.65	-208.71	(87.8)	0.0	0.0
55	0.0	44.54	(10.0)	10.60	124.00	-555.64	-220.11	(92.4)	-8.43	0.0
56	0.0	44.90	(10.5)	0.0	129.32	-584.06	-233.94	(97.2)	-32.71	0.0
57	0.0	44.73	(10.8)	0.0	134.86	-614.02	-250.06	(102.0)	-55.24	0.0
58	0.0	42.23	(10.8)	0.0	138.53	-645.65	-275.81	(106.7)	-78.97	0.0
59	0.0	42.35	(11.3)	0.0	144.30	-678.93	-309.15	(112.0)	-98.72	0.0
60	0.0	43.62	(11.7)	0.0	150.28	-713.96	-336.13	(118.0)	-105.07	0.0
61	0.0	45.02	(12.1)	0.0	156.50	-750.86	-353.94	(124.2)	-111.64	0.0
62	0.0	45.04	(12.1)	0.0	156.55	-789.69	-372.73	(130.6)	-118.66	0.0
63	0.0	42.97	(11.7)	0.0	155.72	-830.61	-402.08	(137.3)	-126.14	0.0
64	0.0	42.49	(11.6)	0.0	139.18	-903.62	-440.14	(145.9)	-134.11	0.0
65	0.0	43.24	(11.8)	0.0	140.90	-956.59	-464.74	(154.0)	-142.62	0.0
66	0.0	42.49	(11.7)	0.0	134.76	-1011.07	-494.91	(161.6)	-151.71	0.0
67	0.0	40.75	(11.7)	0.0	139.52	-1068.62	-529.99	(169.6)	-227.59	0.0
68	0.0	41.31	(12.0)	0.0	144.41	-1129.35	-558.62	(178.5)	-241.11	0.0
69	0.0	41.95	(12.3)	0.0	149.45	-1192.94	-588.76	(187.8)	-255.44	0.0
70	0.0	39.22	(12.0)	0.0	130.66	-1259.19	-621.20	(197.5)	-270.61	0.0
71	0.0	37.63	(12.4)	0.0	131.62	-1329.09	-659.71	(207.4)	-286.63	0.0
72	0.0	37.99	(12.7)	0.0	132.26	-1862.56	-734.02	(221.9)	-303.59	0.0
73	0.0	38.32	(13.1)	0.0	132.27	-2307.56	-839.20	(253.5)	-321.56	0.0
74	0.0	38.27	(13.4)	0.0	131.80	-2431.93	-888.90	(270.0)	-340.62	0.0
75	0.0	37.90	(13.7)	0.0	131.41	-2562.98	-959.79	(289.6)	-360.84	0.0
76	0.0	38.13	(14.1)	0.0	130.69	-2701.74	-1037.98	(306.2)	-382.24	0.0
77	0.0	38.35	(14.4)	0.0	129.65	-2848.90	-1094.25	(322.1)	-404.91	0.0
78	0.0	38.52	(14.8)	0.0	128.29	-3003.84	-1158.51	(338.5)	-472.48	0.0
79	0.0	38.39	(15.2)	0.0	119.26	-3167.20	-1231.35	(355.9)	-613.50	0.0
80	0.0	37.95	(15.5)	0.0	102.09	-3339.42	-1300.88	(374.9)	-653.21	0.0
81	0.0	37.67	(16.0)	0.0	93.22	-3520.56	-1401.44	(396.4)	-695.33	0.0
82	0.0	37.24	(16.4)	0.0	92.46	-4147.94	-1528.05	(425.3)	-740.09	0.0
83	0.0	36.86	(16.9)	0.0	91.70	-4365.67	-1610.95	(447.3)	-787.65	0.0
84	0.0	36.79	(17.5)	0.0	90.63	-4595.54	-1698.86	(470.5)	-837.97	0.0
85	0.0	36.74	(18.1)	0.0	89.24	-4837.47	-1791.18	(494.8)	-891.33	0.0
86	0.0	36.29	(18.7)	0.0	87.71	-5092.06	-1890.17	(520.2)	-947.87	0.0
87	0.0	36.33	(19.3)	0.0	86.13	-5359.90	-1996.54	(546.7)	-1007.74	0.0
88	0.0	36.53	(20.0)	0.0	84.19	-5641.37	-2146.87	(572.4)	-1264.51	0.0
89	0.0	37.11	(20.6)	0.0	81.82	-5937.04	-2334.73	(600.8)	-1366.53	0.0
90	0.0	37.70	(21.3)	0.0	78.90	-6248.16	-2510.17	(637.5)	-1445.24	0.0
91	0.0	38.22	(22.0)	0.0	75.45	-7899.05	-2726.97	(687.3)	-1534.32	0.0
92	0.0	38.16	(22.4)	0.0	71.48	-8311.89	-2882.47	(722.7)	-1632.44	0.0
93	0.0	26.63	(18.1)	0.0	66.95	-8746.14	-3111.96	(753.9)	-1783.59	0.0
94	0.0	22.87	(18.5)	0.0	52.53	-9203.02	-3400.91	(794.1)	-1922.31	0.0
95	0.0	22.65	(19.1)	0.0	45.01	-9683.41	-3586.01	(835.0)	-2026.75	0.0
96	0.0	22.62	(19.8)	0.0	36.30	-10188.35	-3781.66	(877.9)	-2136.84	0.0
97	0.0	22.68	(20.4)	0.0	26.95	-10719.58	-3988.20	(923.1)	-2252.89	0.0
98	0.0	22.71	(21.1)	0.0	16.65	-11278.43	-4206.46	(970.5)	-2375.21	0.0
99	0.0	22.69	(21.8)	0.0	5.47	-11866.32	-4446.13	(1021.1)	-2504.14	0.0
100	0.0	22.85	(22.5)	0.0	0.0	-12484.78	-4703.71	(1074.9)	-2640.02	-6.16

CURRENT PCLTF STATUTE

TABLE 1- 6: SUMMARY OF ANNUAL PCLTF EXPENDITURES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	MONITORING		RESPONSE		POST-CLOSURE CARE		CLAIMS		INTEREST PAYMENTS	
YEAR	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)
1	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
2	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
3	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
4	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
5	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
6	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
7	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
8	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
9	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
10	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
11	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
12	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
13	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	10.41	(10.41)	-0.02	(0.02)
14	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	2.45	(2.45)	-0.22	(0.22)
15	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.95	(0.55)	-0.20	(0.20)
16	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.23	(0.17)	-0.17	(0.17)
17	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	21.30	(20.98)	-0.34	(0.24)
18	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.37	(0.31)	-0.93	(0.80)
19	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	9.68	(9.04)	-1.10	(0.84)
20	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	25.88	(25.63)	-1.66	(1.00)
21	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	20.81	(18.46)	-2.56	(1.38)
22	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	2.00	(1.58)	-3.05	(1.49)
23	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	6.59	(6.57)	-3.03	(1.47)
24	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.40	(0.32)	-3.10	(1.46)
25	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.03	(0.03)	-3.07	(1.45)
26	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.70	(0.57)	-3.05	(1.44)
27	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.19	(0.09)	-3.04	(1.44)
28	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	10.16	(10.16)	-3.01	(1.44)
29	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	7.61	(7.28)	-3.13	(1.43)
30	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	9.31	(8.47)	-3.13	(1.42)
31	0.00	(0.00)	0.0	(0.0)	0.00	(0.00)	0.06	(0.04)	-3.29	(1.42)
32	0.01	(0.00)	0.0	(0.0)	0.02	(0.00)	27.57	(24.18)	-3.76	(1.67)
33	0.03	(0.00)	0.0	(0.0)	0.04	(0.01)	2.08	(1.46)	-4.56	(2.28)
34	0.06	(0.00)	0.01	(0.01)	0.10	(0.01)	0.25	(0.15)	-4.55	(2.29)
35	0.09	(0.00)	0.03	(0.02)	0.15	(0.01)	6.01	(4.71)	-4.57	(2.32)
36	0.12	(0.00)	0.02	(0.02)	0.20	(0.01)	0.18	(0.08)	-4.61	(2.36)
37	0.14	(0.00)	0.18	(0.16)	0.24	(0.01)	1.93	(1.60)	-4.62	(2.38)
38	0.18	(0.01)	0.05	(0.03)	0.29	(0.02)	0.47	(0.37)	-4.65	(2.40)
39	0.20	(0.01)	0.13	(0.06)	0.33	(0.02)	55.69	(38.07)	-5.22	(2.41)
40	0.23	(0.01)	0.12	(0.05)	0.37	(0.02)	7.53	(5.45)	-6.90	(2.75)
41	0.26	(0.01)	0.19	(0.05)	0.42	(0.02)	3.04	(2.16)	-6.96	(2.78)
42	0.29	(0.01)	0.31	(0.10)	0.46	(0.02)	0.05	(0.03)	-7.02	(2.80)
43	0.31	(0.01)	0.66	(0.37)	0.50	(0.02)	7.64	(7.60)	-7.07	(2.83)
44	0.34	(0.01)	0.55	(0.27)	0.54	(0.02)	36.99	(22.90)	-7.60	(3.05)
45	0.37	(0.01)	0.64	(0.28)	0.58	(0.02)	5.09	(4.91)	-8.70	(3.47)
46	0.38	(0.01)	0.75	(0.29)	0.61	(0.02)	10.44	(8.84)	-8.80	(3.50)
47	0.41	(0.01)	0.77	(0.29)	0.64	(0.02)	36.84	(36.74)	-9.69	(3.52)
48	0.43	(0.01)	0.99	(0.32)	0.67	(0.02)	73.88	(72.40)	-12.52	(4.01)
49	0.45	(0.01)	0.91	(0.27)	0.70	(0.02)	0.00	(0.00)	-15.15	(5.32)
50	0.47	(0.01)	1.33	(0.46)	0.74	(0.02)	38.80	(20.71)	-15.86	(5.40)

CURRENT PCLTF STATUTE
(CONTINUED)
TABLE 1- 6: SUMMARY OF ANNUAL PCLTF EXPENDITURES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	MONITORING		RESPONSE		POST-CLOSURE CARE		CLAIMS		INTEREST PAYMENTS	
YEAR	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)
51	0.48	(0.01)	1.16	(0.33)	0.76	(0.02)	11.96	(11.67)	-17.45	(5.54)
52	0.50	(0.01)	1.14	(0.33)	0.79	(0.02)	1.48	(0.98)	-18.07	(5.70)
53	0.51	(0.01)	1.14	(0.32)	0.81	(0.02)	92.87	(92.61)	-20.23	(7.18)
54	0.53	(0.01)	1.12	(0.32)	0.85	(0.02)	0.05	(0.05)	-23.64	(9.94)
55	0.54	(0.01)	1.17	(0.25)	0.87	(0.02)	9.83	(8.89)	-23.97	(10.06)
56	0.56	(0.01)	1.37	(0.32)	0.90	(0.03)	1.48	(1.08)	-24.50	(10.18)
57	0.58	(0.01)	1.36	(0.31)	0.92	(0.02)	24.25	(21.07)	-25.18	(10.27)
58	0.59	(0.01)	1.40	(0.29)	0.94	(0.03)	37.53	(37.50)	-26.70	(10.33)
59	0.60	(0.01)	1.39	(0.29)	0.97	(0.03)	28.29	(27.95)	-28.78	(10.43)
60	0.62	(0.01)	1.35	(0.29)	0.99	(0.03)	0.18	(0.18)	-30.09	(10.56)
61	0.63	(0.01)	1.24	(0.24)	1.02	(0.03)	0.0	(0.0)	-30.46	(10.69)
62	0.64	(0.01)	1.57	(0.41)	1.04	(0.03)	5.94	(5.57)	-30.84	(10.81)
63	0.66	(0.01)	1.92	(0.47)	1.06	(0.03)	39.43	(32.44)	-31.99	(10.93)
64	0.67	(0.01)	2.46	(0.57)	1.08	(0.03)	1.65	(1.35)	-33.67	(11.16)
65	0.68	(0.01)	2.33	(0.52)	1.10	(0.03)	0.63	(0.44)	-34.19	(11.33)
66	0.69	(0.01)	2.30	(0.48)	1.12	(0.03)	21.76	(16.94)	-35.01	(11.43)
67	0.71	(0.01)	2.31	(0.47)	1.14	(0.03)	0.18	(0.12)	-36.05	(11.54)
68	0.73	(0.01)	2.22	(0.45)	1.17	(0.03)	0.09	(0.07)	-36.53	(11.67)
69	0.73	(0.01)	2.07	(0.42)	1.19	(0.03)	0.00	(0.00)	-37.02	(11.81)
70	0.74	(0.01)	2.22	(0.41)	1.21	(0.03)	11.94	(11.85)	-37.56	(11.94)
71	0.76	(0.01)	2.18	(0.41)	1.23	(0.03)	0.0	(0.0)	-38.36	(12.06)
72	0.77	(0.01)	2.35	(0.42)	1.25	(0.03)	103.59	(103.59)	-41.04	(12.40)
73	0.78	(0.01)	2.29	(0.40)	1.28	(0.03)	0.09	(0.04)	-45.11	(13.63)
74	0.80	(0.01)	2.38	(0.40)	1.31	(0.03)	11.68	(10.56)	-45.94	(13.96)
75	0.81	(0.01)	2.38	(0.39)	1.34	(0.03)	36.92	(36.90)	-47.70	(14.39)
76	0.82	(0.01)	2.42	(0.40)	1.36	(0.03)	0.10	(0.08)	-49.60	(14.63)
77	0.84	(0.01)	2.41	(0.39)	1.38	(0.03)	0.03	(0.03)	-50.28	(14.80)
78	0.84	(0.01)	2.40	(0.38)	1.40	(0.03)	10.61	(10.61)	-51.19	(14.95)
79	0.86	(0.01)	2.63	(0.46)	1.42	(0.03)	3.63	(2.73)	-52.31	(15.12)
80	0.87	(0.01)	2.65	(0.45)	1.44	(0.03)	0.08	(0.08)	-53.14	(15.32)
81	0.88	(0.01)	2.66	(0.45)	1.45	(0.03)	56.51	(56.51)	-55.05	(15.57)
82	0.89	(0.01)	2.64	(0.45)	1.47	(0.03)	0.03	(0.03)	-57.71	(16.06)
83	0.90	(0.01)	2.67	(0.46)	1.50	(0.03)	0.35	(0.31)	-58.50	(16.24)
84	0.91	(0.01)	2.55	(0.41)	1.52	(0.04)	0.0	(0.0)	-59.32	(16.43)
85	0.92	(0.01)	2.55	(0.42)	1.54	(0.04)	0.03	(0.03)	-60.14	(16.61)
86	0.93	(0.01)	2.73	(0.47)	1.56	(0.04)	2.86	(2.00)	-61.02	(16.79)
87	0.94	(0.01)	2.69	(0.45)	1.58	(0.03)	0.03	(0.02)	-61.98	(16.97)
88	0.95	(0.01)	2.88	(0.45)	1.60	(0.03)	58.80	(40.41)	-64.08	(17.08)
89	0.96	(0.01)	2.83	(0.47)	1.62	(0.03)	0.58	(0.40)	-67.01	(17.24)
90	0.97	(0.01)	2.85	(0.47)	1.65	(0.03)	62.00	(61.97)	-69.27	(17.59)
91	0.98	(0.01)	2.86	(0.45)	1.67	(0.03)	0.25	(0.23)	-72.36	(18.24)
92	0.99	(0.01)	2.90	(0.43)	1.69	(0.03)	8.35	(7.51)	-73.54	(18.44)
93	1.00	(0.01)	2.92	(0.45)	1.71	(0.03)	85.45	(85.39)	-76.35	(18.50)
94	1.00	(0.01)	2.89	(0.44)	1.73	(0.04)	0.02	(0.02)	-80.23	(18.73)
95	1.02	(0.01)	2.92	(0.44)	1.75	(0.04)	0.03	(0.03)	-81.34	(18.94)
96	1.02	(0.01)	3.18	(0.48)	1.77	(0.04)	0.02	(0.02)	-82.48	(19.15)
97	1.04	(0.01)	2.95	(0.45)	1.79	(0.04)	0.0	(0.0)	-83.64	(19.36)
98	1.04	(0.01)	3.24	(0.57)	1.80	(0.04)	0.66	(0.45)	-84.82	(19.57)
99	1.04	(0.01)	3.14	(0.56)	1.82	(0.04)	8.14	(4.58)	-86.21	(19.80)
100	1.05	(0.01)	3.14	(0.57)	1.83	(0.04)	0.02	(0.02)	-87.69	(20.04)

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TABLE 1- 7A: FREQUENCY OF RELEASES AT FACILITIES
X = EXPECTED RELEASES; S = SIMULATED RELEASES; D = DETECTED RELEASES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

YEARS	IP ON			DETECTABLE ON			TOXIC ON			TASTE/ODOR			DETECTABLE OFF			TOXIC OFF			BATHTUB		
	X	S	D	X	S	D	X	S	D	X	S	D	X	S	D	X	S	D	X	S	D
< 1	472	472	--	458	458	--	373	373	--	54	54	--	70	70	--	60	60	--	0	0	--
1 - 10	60	59	401	71	69	331	65	64	259	31	30	42	41	40	87	34	33	69	0	0	0
11 - 20	14	13	11	35	32	25	31	28	17	28	27	18	38	37	31	33	31	23	0	0	0
21 - 30	11	9	7	29	26	16	26	24	12	24	22	15	34	31	26	27	25	17	0	0	0
31 - 40	11	10	7	26	24	11	21	18	8	20	11	7	31	14	9	24	14	8	0	0	0
41 - 50	12	10	6	22	19	7	21	18	6	17	6	4	29	9	4	20	7	4	0	0	0
51 - 60	12	11	6	20	17	5	19	16	5	13	5	3	25	9	3	18	6	2	0	0	0
61 - 70	9	8	4	14	12	4	14	12	3	10	5	3	19	7	3	14	5	2	0	0	0
71 - 80	10	9	5	12	10	3	13	10	3	7	3	2	13	5	2	10	4	1	0	0	0
81 - 90	9	7	4	8	7	3	9	7	2	5	2	2	8	4	2	6	3	1	0	0	0
91 -100	9	8	4	7	6	2	8	6	2	3	2	1	5	2	1	4	2	1	0	0	0
101 -150	33	--	--	23	--	--	26	--	--	5	--	--	5	--	--	4	--	--	0	--	--
>150	18	--	--	17	--	--	17	--	--	2	--	--	1	--	--	1	--	--	0	--	--
TOTAL	680	616	455	742	680	407	643	576	317	219	167	97	319	228	168	255	190	128	0	0	0

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TABLE 1- 7B: FREQUENCY OF RELEASES AT FACILITIES WITH QUALIFICATION STATUS PENDING
S = SIMULATED RELEASES; D = DETECTED RELEASES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

	IP ON		DETECTABLE ON		TOXIC ON		TASTE/ODOR		DETECTABLE OFF		TOXIC OFF		BATHTUB	
YEARS	S	D	S	D	S	D	S	D	S	D	S	D	S	D
1 - 10	52	280	58	228	53	178	23	29	31	61	26	49	0	0
11 - 20	7	7	16	15	15	11	13	9	18	15	15	11	0	0
21 - 30	3	4	10	9	9	6	8	6	11	10	9	6	0	0
31 - 40	3	3	7	5	5	4	3	2	4	3	4	2	0	0
41 - 50	2	2	3	3	4	2	1	1	2	1	1	1	0	0
51 - 60	2	2	2	2	3	2	1	1	1	1	1	0	0	0
61 - 70	1	1	2	1	2	1	1	1	1	1	1	0	0	0
71 - 80	2	2	1	1	2	1	0	0	1	0	0	0	0	0
81 - 90	1	1	1	1	1	0	0	0	0	0	0	0	0	0
91 -100	1	1	0	0	1	0	0	0	0	0	0	0	0	0
TOTAL	74	303	100	265	95	205	50	49	69	92	57	69	0	0

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TABLE 1- 7C: FREQUENCY OF RELEASES AT QUALIFIED FACILITIES
S = SIMULATED RELEASES; D = DETECTED RELEASES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

YEARS	IP ON		DETECTABLE ON		TOXIC ON		TASTE/ODOR		DETECTABLE OFF		TOXIC OFF		BATHTUB	
	S	D	S	D	S	D	S	D	S	D	S	D	S	D
1 - 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 - 20	2	1	2	1	2	0	1	1	2	1	1	0	0	0
21 - 30	3	2	5	1	4	1	2	1	3	1	2	1	0	0
31 - 40	3	3	6	2	5	2	2	2	3	2	3	1	0	0
41 - 50	4	3	5	2	5	2	2	1	3	2	3	1	0	0
51 - 60	5	3	5	2	5	2	2	1	4	1	3	1	0	0
61 - 70	4	3	4	2	4	2	2	1	3	1	2	1	0	0
71 - 80	4	2	4	1	4	1	1	1	2	1	2	1	0	0
81 - 90	4	3	3	1	4	1	1	1	2	1	1	0	0	0
91 -100	5	3	3	1	3	1	1	1	1	1	1	0	0	0
TOTAL	34	23	37	13	36	12	14	10	23	11	18	6	0	0

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TABLE 1- 7D: FREQUENCY OF RELEASES AT UNQUALIFIED FACILITIES
S = SIMULATED RELEASES; D = DETECTED RELEASES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

	IP ON		DETECTABLE ON		TOXIC ON		TASTE/ODOR		DETECTABLE OFF		TOXIC OFF		BATHTUB	
YEARS	S	D	S	D	S	D	S	D	S	D	S	D	S	D
1 - 10	7	120	11	103	11	81	7	13	9	26	7	20	0	0
11 - 20	4	3	13	9	11	5	12	8	17	15	15	11	0	0
21 - 30	3	2	12	6	11	4	13	8	17	15	14	10	0	0
31 - 40	3	1	11	3	8	3	5	3	7	5	7	5	0	0
41 - 50	4	1	10	1	9	2	3	2	4	2	4	2	0	0
51 - 60	4	1	9	1	8	1	2	1	3	1	3	1	0	0
61 - 70	3	1	6	1	6	1	2	1	3	1	2	1	0	0
71 - 80	3	1	5	1	5	0	2	1	2	1	2	0	0	0
81 - 90	2	0	3	0	3	0	1	1	2	1	2	0	0	0
91 -100	2	0	3	0	2	0	1	0	1	0	1	0	0	0
TOTAL	35	130	83	125	74	97	48	38	65	67	57	50	0	0

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TABLE 1- 8A: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
1	4.59	0.00	0.01	0.0	0.0	0.0	0.0
2	4.84	5.94	0.06	104.63	1.25	2.26	0.48
3	6.03	34.11	0.13	775.02	10.58	18.81	3.70
4	5.16	53.64	0.34	758.62	10.49	24.07	6.46
5	4.84	72.73	0.53	1275.29	12.32	27.52	6.15
6	4.32	89.22	0.71	1107.74	6.43	23.84	6.07
7	2.79	79.45	0.81	233.09	7.41	9.54	4.10
8	2.70	70.19	0.84	117.36	2.25	3.00	0.90
9	2.62	60.33	0.76	122.75	3.10	5.35	0.88
10	2.50	50.19	0.68	210.21	1.73	4.94	1.00
11	2.40	40.36	0.62	101.11	1.90	3.81	0.69
12	2.33	39.01	0.55	250.57	2.10	5.02	0.84
13	2.26	39.19	0.54	135.34	3.05	4.82	0.73
14	2.19	37.99	0.51	175.35	4.42	2.93	0.75
15	2.13	36.70	0.51	145.85	1.31	6.12	0.56
16	2.08	35.62	0.48	128.13	3.57	2.27	0.82
17	2.03	35.29	0.47	61.90	2.58	1.46	0.48
18	1.96	34.05	0.43	208.57	1.20	2.90	0.73
19	1.92	34.17	0.42	104.95	1.08	1.94	0.73
20	1.87	32.78	0.40	156.79	1.25	4.02	0.46
21	1.83	31.87	0.39	65.61	1.50	3.48	0.42
22	1.78	30.35	0.39	97.15	0.65	3.72	0.46
23	1.72	29.04	0.36	40.43	2.24	2.86	0.38
24	1.68	28.34	0.36	98.03	1.29	3.64	0.44
25	1.63	28.05	0.33	139.46	0.96	2.77	0.38
26	1.59	27.27	0.32	19.26	0.43	0.63	0.21
27	1.57	26.37	0.30	30.18	0.51	0.65	0.31
28	1.52	25.76	0.30	68.48	1.07	0.62	0.31
29	1.50	25.20	0.30	64.44	0.87	2.05	0.33
30	1.45	24.88	0.30	114.56	2.18	0.84	0.29
31	1.44	24.40	0.29	202.51	1.15	2.36	0.29
32	1.39	23.13	0.29	0.29	0.32	0.17	0.10
33	1.36	22.66	0.27	76.08	0.63	0.45	0.25
34	1.33	22.10	0.25	4.43	0.10	1.67	0.10
35	1.29	21.40	0.24	19.44	0.24	1.60	0.13
36	1.27	20.90	0.24	59.28	0.05	0.31	0.04
37	1.23	20.09	0.24	0.0	0.08	0.01	0.02
38	1.21	19.61	0.25	16.57	0.65	0.10	0.27
39	1.18	19.21	0.25	16.35	2.63	1.97	0.13
40	1.15	18.23	0.24	10.73	1.45	0.65	0.13
41	1.13	17.53	0.24	0.49	0.03	0.03	0.04
42	1.10	17.10	0.25	0.0	0.00	0.01	0.04
43	1.08	16.07	0.24	101.63	0.0	0.0	0.02
44	1.05	15.47	0.25	28.65	0.38	0.09	0.13
45	1.03	15.16	0.26	33.59	0.04	0.07	0.04
46	1.01	14.55	0.26	0.0	0.01	0.0	0.06
47	0.99	14.23	0.23	0.0	0.05	0.0	0.04
48	0.96	13.58	0.22	17.44	0.03	0.31	0.04
49	0.93	13.48	0.21	0.0	0.01	0.01	0.04
50	0.92	13.16	0.19	0.0	0.00	0.31	0.0

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TABLE 1- 8A: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
51	0.90	12.69	0.18	0.14	0.02	0.02	0.08
52	0.89	12.50	0.18	0.0	0.04	0.0	0.02
53	0.88	11.92	0.18	0.0	0.0	0.0	0.0
54	0.87	11.50	0.18	15.32	0.11	0.35	0.04
55	0.87	11.56	0.18	0.0	0.03	0.31	0.0
56	0.85	10.66	0.18	0.0	0.01	0.37	0.02
57	0.85	10.30	0.18	0.0	0.28	0.05	0.0
58	0.84	10.19	0.18	0.14	0.00	0.0	0.02
59	0.83	9.95	0.18	0.0	0.01	0.01	0.02
60	0.82	9.99	0.18	0.01	0.01	0.03	0.02
61	0.81	9.56	0.19	0.0	0.0	0.0	0.0
62	0.80	9.17	0.19	0.0	0.00	0.0	0.02
63	0.80	8.98	0.19	0.00	0.00	0.0	0.04
64	0.79	8.96	0.18	60.35	0.38	0.0	0.02
65	0.79	8.82	0.18	0.0	0.03	0.02	0.04
66	0.78	8.34	0.17	0.0	0.29	0.31	0.02
67	0.77	8.16	0.16	0.0	1.51	1.56	0.0
68	0.76	7.77	0.14	8.15	0.00	0.0	0.02
69	0.75	7.58	0.14	0.0	0.00	0.0	0.0
70	0.75	7.42	0.14	0.0	0.00	0.0	0.02
71	0.74	7.10	0.13	1.87	0.01	0.0	0.06
72	0.74	6.89	0.13	12.66	0.00	0.31	0.02
73	0.73	6.89	0.13	5.83	0.08	0.70	0.06
74	0.72	6.58	0.12	40.66	0.0	0.31	0.02
75	0.72	6.58	0.13	0.0	0.0	0.0	0.0
76	0.70	6.23	0.11	0.12	0.00	0.0	0.02
77	0.70	6.02	0.11	0.0	0.0	0.0	0.0
78	0.69	5.93	0.11	0.0	0.0	0.0	0.0
79	0.69	5.84	0.11	0.0	0.0	0.0	0.0
80	0.69	5.72	0.11	15.95	0.00	0.0	0.02
81	0.68	5.53	0.12	0.0	0.00	0.0	0.02
82	0.67	5.45	0.12	0.0	0.0	0.0	0.0
83	0.67	5.16	0.11	0.0	0.01	0.0	0.02
84	0.67	5.13	0.12	0.34	0.0	0.0	0.02
85	0.66	4.81	0.11	0.0	0.0	0.01	0.02
86	0.66	4.77	0.11	0.0	0.0	0.0	0.0
87	0.64	4.65	0.11	0.0	0.00	0.0	0.02
88	0.64	4.41	0.12	0.0	0.0	0.0	0.02
89	0.64	4.23	0.11	0.0	0.0	0.0	0.0
90	0.64	4.14	0.12	0.0	0.0	0.0	0.0
91	0.63	4.02	0.12	0.0	0.00	0.03	0.0
92	0.62	3.96	0.12	0.0	0.0	0.0	0.0
93	0.62	3.84	0.11	0.0	0.0	0.0	0.0
94	0.61	4.37	0.15	0.0	0.03	0.0	0.02
95	0.61	3.79	0.15	0.0	0.03	0.0	0.0
96	0.61	3.61	0.15	1.88	0.01	0.03	0.04
97	0.60	3.67	0.15	0.93	0.05	0.31	0.02
98	0.60	3.49	0.14	0.0	0.0	0.0	0.0
99	0.59	3.41	0.11	0.0	0.0	0.0	0.0
100	0.58	3.22	0.11	0.0	0.0	0.0	0.0

CURRENT PCLTF STATUTE

TABLE 1- 8B: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.00	0.0	0.01	0.0	0.0	0.0	0.0
7	0.01	0.0	0.03	0.0	0.0	0.0	0.0
8	0.03	0.0	0.06	0.0	0.0	0.0	0.0
9	0.07	0.0	0.13	0.0	0.0	0.0	0.0
10	0.12	0.01	0.19	0.0	0.0	0.0	0.0
11	0.16	0.13	0.26	0.0	0.0	0.0	0.0
12	0.20	0.14	0.33	0.0	0.0	0.0	0.0
13	0.23	0.13	0.39	10.07	0.00	0.31	0.02
14	0.28	0.15	0.44	2.36	0.0	0.07	0.02
15	0.31	0.26	0.49	0.13	0.13	0.66	0.02
16	0.34	0.34	0.55	0.13	0.05	0.01	0.04
17	0.38	0.80	0.60	20.61	0.04	0.63	0.02
18	0.41	0.72	0.65	0.0	0.02	0.33	0.02
19	0.44	1.24	0.69	8.90	0.13	0.63	0.02
20	0.47	1.22	0.74	25.61	0.14	0.07	0.06
21	0.49	1.24	0.78	20.28	0.38	0.07	0.08
22	0.52	1.42	0.81	0.03	0.04	1.89	0.04
23	0.54	1.18	0.85	6.55	0.00	0.0	0.04
24	0.56	1.48	0.88	0.04	0.01	0.33	0.02
25	0.58	1.13	0.92	0.0	0.01	0.0	0.02
26	0.60	1.17	0.95	0.0	0.31	0.33	0.06
27	0.62	1.18	0.98	0.0	0.06	0.06	0.06
28	0.63	1.27	1.00	10.14	0.00	0.0	0.02
29	0.65	1.22	1.03	6.95	0.00	0.64	0.02
30	0.67	1.78	1.06	8.14	0.17	0.96	0.04
31	0.68	1.55	1.08	0.0	0.01	0.05	0.0
32	0.69	1.57	1.09	27.12	0.26	0.09	0.10
33	0.69	1.94	1.11	1.66	0.20	0.14	0.08
34	0.70	1.85	1.12	0.12	0.02	0.02	0.08
35	0.71	2.03	1.14	5.48	0.07	0.42	0.04
36	0.72	2.15	1.16	0.01	0.00	0.11	0.06
37	0.73	2.35	1.17	0.0	0.02	1.88	0.04
38	0.74	2.54	1.18	0.08	0.04	0.33	0.02
39	0.75	2.26	1.20	54.66	0.04	0.94	0.04
40	0.77	2.25	1.22	7.37	0.01	0.07	0.08
41	0.78	2.76	1.23	2.49	0.03	0.40	0.10
42	0.78	2.83	1.26	0.0	0.02	0.01	0.02
43	0.80	2.91	1.28	7.26	0.03	0.33	0.02
44	0.81	2.87	1.30	36.08	0.10	0.70	0.10
45	0.82	2.85	1.32	4.93	0.02	0.09	0.06
46	0.83	2.91	1.34	8.42	0.02	1.90	0.10
47	0.84	2.93	1.36	36.40	0.05	0.37	0.02
48	0.86	3.14	1.39	73.00	0.14	0.64	0.10
49	0.87	3.08	1.42	0.0	0.00	0.0	0.0
50	0.88	3.76	1.45	36.37	0.09	2.23	0.10

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TABLE 1- 8B: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
51	0.89	3.57	1.47	11.72	0.08	0.07	0.08
52	0.90	3.89	1.49	0.95	0.11	0.37	0.06
53	0.91	3.90	1.51	91.16	0.06	1.59	0.06
54	0.92	3.87	1.53	0.03	0.00	0.0	0.02
55	0.93	3.97	1.55	8.02	1.02	0.73	0.06
56	0.94	4.12	1.57	0.88	0.58	0.0	0.02
57	0.96	4.12	1.59	23.84	0.03	0.31	0.06
58	0.97	4.15	1.61	37.16	0.01	0.31	0.04
59	0.97	4.44	1.63	27.60	0.02	0.63	0.04
60	0.99	4.07	1.65	0.10	0.02	0.01	0.04
61	1.00	3.99	1.67	0.0	0.0	0.0	0.0
62	1.01	4.38	1.70	5.48	0.22	0.16	0.08
63	1.02	4.65	1.72	38.83	0.13	0.39	0.08
64	1.02	5.19	1.74	1.19	0.21	0.11	0.13
65	1.03	5.07	1.76	0.0	0.00	0.63	0.0
66	1.04	5.04	1.78	21.22	0.08	0.38	0.08
67	1.05	5.02	1.81	0.0	0.10	0.05	0.02
68	1.06	4.96	1.83	0.0	0.00	0.09	0.0
69	1.07	4.80	1.85	0.0	0.00	0.0	0.0
70	1.07	4.99	1.86	11.51	0.03	0.31	0.08
71	1.08	4.94	1.88	0.0	0.0	0.0	0.0
72	1.09	5.10	1.90	101.98	0.03	1.56	0.02
73	1.10	5.03	1.91	0.0	0.01	0.0	0.08
74	1.11	5.22	1.93	11.22	0.07	0.33	0.06
75	1.11	5.19	1.94	36.56	0.01	0.31	0.04
76	1.12	5.26	1.96	0.0	0.00	0.05	0.04
77	1.13	5.26	1.97	0.0	0.0	0.03	0.0
78	1.13	5.26	1.98	10.28	0.00	0.31	0.02
79	1.14	5.44	2.00	2.60	0.30	0.68	0.04
80	1.14	5.45	2.01	0.0	0.0	0.05	0.02
81	1.15	5.46	2.02	56.48	0.00	0.0	0.02
82	1.16	5.43	2.04	0.0	0.01	0.0	0.02
83	1.16	5.47	2.05	0.0	0.00	0.33	0.02
84	1.17	5.35	2.06	0.0	0.0	0.0	0.0
85	1.18	5.36	2.08	0.0	0.01	0.0	0.02
86	1.19	5.54	2.10	2.78	0.02	0.0	0.06
87	1.19	5.51	2.11	0.0	0.00	0.0	0.02
88	1.20	5.69	2.12	57.94	0.09	0.71	0.06
89	1.21	5.65	2.13	0.0	0.26	0.31	0.0
90	1.21	5.66	2.15	61.61	0.04	0.33	0.02
91	1.22	5.67	2.16	0.19	0.01	0.01	0.04
92	1.22	5.71	2.18	7.28	0.90	0.11	0.06
93	1.23	5.73	2.19	85.37	0.00	0.05	0.02
94	1.23	5.70	2.21	0.0	0.02	0.0	0.0
95	1.25	5.73	2.23	0.01	0.00	0.0	0.02
96	1.25	6.00	2.24	0.0	0.00	0.0	0.02
97	1.26	5.76	2.26	0.0	0.0	0.0	0.0
98	1.26	6.08	2.27	0.0	0.02	0.64	0.0
99	1.27	5.97	2.31	5.27	2.78	0.0	0.08
100	1.28	5.96	2.33	0.0	0.0	0.0	0.02

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TABLE 1- 8C: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
1	0.48	5.06	0.30	119.40	1.90	3.00	0.90
2	1.04	11.28	0.79	127.41	0.96	5.04	0.61
3	1.54	23.69	1.22	300.21	6.41	11.17	2.24
4	1.64	31.45	1.57	612.94	4.22	12.55	2.36
5	1.58	35.76	1.85	332.64	2.23	9.07	2.15
6	1.45	40.70	1.82	324.00	6.03	7.13	1.51
7	0.97	35.63	1.80	101.46	1.98	7.83	1.53
8	0.95	31.58	1.80	23.04	0.36	2.94	0.27
9	0.98	31.06	1.87	175.63	0.57	3.39	0.25
10	1.00	30.84	1.95	246.06	4.49	6.19	0.54
11	1.03	31.59	2.04	543.79	1.50	4.05	0.88
12	1.06	33.35	2.10	344.54	0.70	5.01	0.56
13	1.07	35.22	2.15	75.53	0.59	1.70	0.65
14	1.07	37.76	2.19	87.24	1.47	3.11	0.59
15	1.09	39.74	2.23	268.66	4.53	6.92	0.61
16	1.08	40.41	2.26	94.65	3.28	5.31	0.59
17	1.09	42.04	2.30	350.99	1.50	9.09	0.65
18	1.09	43.59	2.34	77.38	5.67	4.61	0.77
19	1.11	45.26	2.37	243.72	1.59	4.85	0.65
20	1.11	46.63	2.41	219.70	1.15	6.52	0.71
21	1.13	48.69	2.45	263.01	2.41	4.93	0.67
22	1.13	51.08	2.48	55.19	2.39	5.41	0.75
23	1.13	52.47	2.50	80.54	3.34	3.75	0.59
24	1.13	52.75	2.53	96.82	0.85	3.08	0.56
25	1.13	53.97	2.56	185.14	2.68	4.49	0.82
26	1.14	55.25	2.59	174.29	2.13	4.73	0.63
27	1.14	56.59	2.61	201.00	1.23	5.77	0.52
28	1.14	57.56	2.62	94.33	3.54	1.90	0.59
29	1.14	59.85	2.63	91.05	4.23	5.14	0.63
30	1.14	60.92	2.62	484.05	4.01	2.70	0.54
31	1.10	61.57	2.54	114.36	1.22	1.52	0.42
32	0.94	62.55	2.36	209.73	1.85	3.94	0.65
33	0.81	63.07	2.22	98.43	0.33	1.47	0.38
34	0.69	63.13	2.08	42.62	1.23	0.40	0.25
35	0.58	63.48	1.99	52.09	0.59	1.42	0.29
36	0.54	63.98	1.98	36.77	0.15	1.72	0.17
37	0.53	64.45	1.98	66.45	0.41	0.05	0.19
38	0.51	65.09	1.99	34.91	2.17	1.02	0.23
39	0.51	65.50	2.00	36.33	0.17	1.17	0.27
40	0.50	66.46	2.02	1.87	0.48	0.46	0.10
41	0.49	67.31	2.03	49.92	0.49	0.40	0.17
42	0.49	67.52	2.03	2.47	0.07	0.08	0.08
43	0.48	68.35	2.05	49.80	0.04	0.39	0.10
44	0.47	68.89	2.05	130.58	0.19	1.91	0.13
45	0.46	69.45	2.06	0.03	0.36	0.40	0.13
46	0.45	70.13	2.08	156.46	0.07	1.75	0.10
47	0.45	70.60	2.09	16.52	0.02	1.63	0.06
48	0.45	71.29	2.10	31.51	0.03	1.72	0.17
49	0.44	72.12	2.11	5.37	0.58	1.73	0.04
50	0.43	72.18	2.12	0.68	0.01	0.33	0.06

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TABLE 1- 8C: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
51	0.42	73.28	2.12	74.38	0.08	0.65	0.10
52	0.41	72.73	2.12	0.08	0.02	0.31	0.06
53	0.41	73.25	2.13	0.0	1.94	0.06	0.06
54	0.41	73.66	2.14	0.71	0.02	0.0	0.02
55	0.40	73.70	2.14	21.89	0.0	0.0	0.02
56	0.40	74.35	2.15	0.0	0.01	0.01	0.02
57	0.40	74.66	2.16	0.0	0.0	0.31	0.04
58	0.39	74.97	2.17	4.96	0.03	0.02	0.08
59	0.38	75.28	2.17	21.73	0.00	0.63	0.04
60	0.38	75.48	2.18	83.81	0.02	1.56	0.04
61	0.38	75.72	2.18	134.92	0.01	0.31	0.06
62	0.38	76.39	2.19	1.28	0.06	0.04	0.04
63	0.37	76.48	2.19	0.0	0.03	0.33	0.0
64	0.37	76.51	2.20	0.0	0.0	0.0	0.0
65	0.36	76.95	2.20	30.74	2.06	0.63	0.04
66	0.36	77.50	2.21	8.77	0.12	0.0	0.02
67	0.36	77.88	2.21	6.26	0.01	0.07	0.06
68	0.35	78.13	2.22	0.0	0.01	0.01	0.0
69	0.35	78.30	2.22	0.18	0.03	1.57	0.04
70	0.35	78.33	2.22	0.13	0.09	0.0	0.04
71	0.35	78.61	2.23	0.0	0.0	0.0	0.02
72	0.34	78.85	2.24	0.0	0.01	0.33	0.02
73	0.34	79.13	2.24	4.05	0.14	1.63	0.02
74	0.34	79.32	2.24	0.0	1.93	0.64	0.02
75	0.34	79.39	2.25	49.18	0.01	0.31	0.02
76	0.34	79.98	2.25	31.46	0.21	0.31	0.08
77	0.34	80.08	2.25	0.0	0.00	0.0	0.02
78	0.34	80.15	2.25	1.90	0.01	0.18	0.04
79	0.33	80.27	2.25	0.0	0.04	0.33	0.02
80	0.33	80.45	2.25	0.0	0.01	0.33	0.02
81	0.33	80.52	2.26	0.0	0.01	0.0	0.0
82	0.32	80.64	2.25	86.52	0.02	1.57	0.04
83	0.32	80.91	2.26	0.0	0.0	0.0	0.0
84	0.32	81.01	2.26	17.48	0.0	0.0	0.02
85	0.32	81.31	2.26	0.0	0.01	0.31	0.0
86	0.32	81.37	2.26	0.0	0.00	0.07	0.02
87	0.32	81.48	2.27	116.64	0.06	0.0	0.06
88	0.32	81.79	2.27	1.08	0.05	0.04	0.04
89	0.31	81.91	2.27	0.0	0.01	0.66	0.0
90	0.31	82.01	2.28	6.80	0.10	0.44	0.02
91	0.31	82.18	2.27	0.67	0.04	0.03	0.04
92	0.31	82.24	2.27	0.17	0.01	0.01	0.02
93	0.31	82.30	2.27	2.25	0.03	0.06	0.06
94	0.31	82.31	2.27	0.0	0.0	0.0	0.0
95	0.31	82.33	2.27	0.0	0.0	0.0	0.0
96	0.31	82.48	2.28	2.47	0.19	0.05	0.02
97	0.31	82.74	2.27	0.0	0.02	0.0	0.0
98	0.31	83.23	2.27	0.0	0.00	0.05	0.0
99	0.31	83.06	2.28	18.69	0.31	0.33	0.02
100	0.31	83.25	2.28	9.22	0.03	0.0	0.02

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TABLE 1- 9A: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	4.8	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
3	6.0	0.0	0.0	0.0	33.1	0.0	0.1	0.9	0.1	0.0	0.0	0.0
4	5.1	0.0	0.0	0.1	49.2	0.0	0.4	4.0	0.3	0.0	0.0	0.0
5	4.7	0.0	0.0	0.1	64.2	0.0	0.9	7.7	0.5	0.0	0.0	0.0
6	4.2	0.0	0.0	0.1	78.1	0.0	1.1	10.0	0.7	0.0	0.0	0.0
7	2.7	0.0	0.0	0.1	66.2	0.0	1.3	11.9	0.8	0.0	0.0	0.0
8	2.6	0.0	0.0	0.1	58.1	0.0	1.2	10.9	0.8	0.0	0.0	0.0
9	2.5	0.0	0.0	0.1	51.9	0.0	0.8	7.6	0.7	0.0	0.0	0.0
10	2.5	0.0	0.0	0.0	44.8	0.0	0.5	4.9	0.6	0.0	0.0	0.0
11	2.4	0.0	0.0	0.0	37.1	0.0	0.3	3.0	0.6	0.0	0.0	0.0
12	2.3	0.0	0.0	0.0	36.8	0.0	0.2	2.0	0.5	0.0	0.0	0.0
13	2.2	0.0	0.0	0.0	37.4	0.0	0.2	1.6	0.5	0.0	0.0	0.0
14	2.2	0.0	0.0	0.0	36.0	0.0	0.2	1.7	0.5	0.0	0.0	0.0
15	2.1	0.0	0.0	0.0	34.9	0.0	0.2	1.6	0.5	0.0	0.0	0.0
16	2.1	0.0	0.0	0.0	34.1	0.0	0.2	1.4	0.5	0.0	0.0	0.0
17	2.0	0.0	0.0	0.0	33.8	0.0	0.1	1.3	0.5	0.0	0.0	0.0
18	1.9	0.0	0.0	0.0	32.6	0.0	0.1	1.3	0.4	0.0	0.0	0.0
19	1.9	0.0	0.0	0.0	32.7	0.0	0.1	1.3	0.4	0.0	0.0	0.0
20	1.9	0.0	0.0	0.0	31.5	0.0	0.1	1.2	0.4	0.0	0.0	0.0
21	1.8	0.0	0.0	0.0	30.6	0.0	0.1	1.2	0.4	0.0	0.0	0.0
22	1.8	0.0	0.0	0.0	29.5	0.0	0.1	0.7	0.4	0.0	0.0	0.0
23	1.7	0.0	0.0	0.0	28.4	0.0	0.1	0.6	0.4	0.0	0.0	0.0
24	1.7	0.0	0.0	0.0	27.7	0.0	0.1	0.6	0.4	0.0	0.0	0.0
25	1.6	0.0	0.0	0.0	27.3	0.0	0.1	0.7	0.3	0.0	0.0	0.0
26	1.6	0.0	0.0	0.0	26.6	0.0	0.1	0.6	0.3	0.0	0.0	0.0
27	1.6	0.0	0.0	0.0	25.8	0.0	0.1	0.5	0.3	0.0	0.0	0.0
28	1.5	0.0	0.0	0.0	25.1	0.0	0.1	0.6	0.3	0.0	0.0	0.0
29	1.5	0.0	0.0	0.0	24.7	0.0	0.1	0.5	0.3	0.0	0.0	0.0
30	1.4	0.0	0.0	0.0	24.3	0.0	0.1	0.5	0.3	0.0	0.0	0.0
31	1.4	0.0	0.0	0.0	23.9	0.0	0.1	0.5	0.3	0.0	0.0	0.0
32	1.4	0.0	0.0	0.0	22.7	0.0	0.0	0.4	0.3	0.0	0.0	0.0
33	1.4	0.0	0.0	0.0	22.2	0.0	0.0	0.4	0.3	0.0	0.0	0.0
34	1.3	0.0	0.0	0.0	21.6	0.0	0.0	0.4	0.3	0.0	0.0	0.0
35	1.3	0.0	0.0	0.0	21.0	0.0	0.0	0.3	0.2	0.0	0.0	0.0
36	1.3	0.0	0.0	0.0	20.4	0.0	0.0	0.4	0.2	0.0	0.0	0.0
37	1.2	0.0	0.0	0.0	19.6	0.0	0.0	0.4	0.2	0.0	0.0	0.0
38	1.2	0.0	0.0	0.0	19.1	0.0	0.0	0.4	0.2	0.0	0.0	0.0
39	1.2	0.0	0.0	0.0	18.9	0.0	0.0	0.3	0.2	0.0	0.0	0.0
40	1.1	0.0	0.0	0.0	18.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0
41	1.1	0.0	0.0	0.0	17.2	0.0	0.0	0.3	0.2	0.0	0.0	0.0
42	1.1	0.0	0.0	0.0	16.7	0.0	0.0	0.4	0.3	0.0	0.0	0.0
43	1.1	0.0	0.0	0.0	15.6	0.0	0.0	0.4	0.2	0.0	0.0	0.0
44	1.0	0.0	0.0	0.0	15.1	0.0	0.0	0.4	0.2	0.0	0.0	0.0
45	1.0	0.0	0.0	0.0	14.8	0.0	0.0	0.3	0.3	0.0	0.0	0.0
46	1.0	0.0	0.0	0.0	14.1	0.0	0.0	0.4	0.3	0.0	0.0	0.0
47	1.0	0.0	0.0	0.0	13.9	0.0	0.0	0.3	0.2	0.0	0.0	0.0
48	1.0	0.0	0.0	0.0	13.3	0.0	0.0	0.2	0.2	0.0	0.0	0.0
49	0.9	0.0	0.0	0.0	13.2	0.0	0.0	0.2	0.2	0.0	0.0	0.0
50	0.9	0.0	0.0	0.0	12.9	0.0	0.0	0.2	0.2	0.0	0.0	0.0

CURRENT PCLTF STATUTE

TABLE 1- 9A: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.9	0.0	0.0	0.0	12.5	0.0	0.0	0.2	0.2	0.0	0.0	0.0
52	0.9	0.0	0.0	0.0	12.3	0.0	0.0	0.2	0.2	0.0	0.0	0.0
53	0.9	0.0	0.0	0.0	11.8	0.0	0.0	0.2	0.2	0.0	0.0	0.0
54	0.9	0.0	0.0	0.0	11.3	0.0	0.0	0.2	0.2	0.0	0.0	0.0
55	0.9	0.0	0.0	0.0	11.4	0.0	0.0	0.2	0.2	0.0	0.0	0.0
56	0.8	0.0	0.0	0.0	10.5	0.0	0.0	0.1	0.2	0.0	0.0	0.0
57	0.8	0.0	0.0	0.0	10.2	0.0	0.0	0.1	0.2	0.0	0.0	0.0
58	0.8	0.0	0.0	0.0	10.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0
59	0.8	0.0	0.0	0.0	9.8	0.0	0.0	0.1	0.2	0.0	0.0	0.0
60	0.8	0.0	0.0	0.0	9.9	0.0	0.0	0.1	0.2	0.0	0.0	0.0
61	0.8	0.0	0.0	0.0	9.4	0.0	0.0	0.1	0.2	0.0	0.0	0.0
62	0.8	0.0	0.0	0.0	9.1	0.0	0.0	0.1	0.2	0.0	0.0	0.0
63	0.8	0.0	0.0	0.0	8.9	0.0	0.0	0.1	0.2	0.0	0.0	0.0
64	0.8	0.0	0.0	0.0	8.9	0.0	0.0	0.1	0.2	0.0	0.0	0.0
65	0.8	0.0	0.0	0.0	8.7	0.0	0.0	0.1	0.2	0.0	0.0	0.0
66	0.8	0.0	0.0	0.0	8.1	0.0	0.0	0.2	0.2	0.0	0.0	0.0
67	0.8	0.0	0.0	0.0	7.9	0.0	0.0	0.2	0.2	0.0	0.0	0.0
68	0.8	0.0	0.0	0.0	7.6	0.0	0.0	0.2	0.1	0.0	0.0	0.0
69	0.7	0.0	0.0	0.0	7.4	0.0	0.0	0.1	0.1	0.0	0.0	0.0
70	0.7	0.0	0.0	0.0	7.3	0.0	0.0	0.1	0.1	0.0	0.0	0.0
71	0.7	0.0	0.0	0.0	7.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
72	0.7	0.0	0.0	0.0	6.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
73	0.7	0.0	0.0	0.0	6.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
74	0.7	0.0	0.0	0.0	6.5	0.0	0.0	0.1	0.1	0.0	0.0	0.0
75	0.7	0.0	0.0	0.0	6.5	0.0	0.0	0.1	0.1	0.0	0.0	0.0
76	0.7	0.0	0.0	0.0	6.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0
77	0.7	0.0	0.0	0.0	5.9	0.0	0.0	0.1	0.1	0.0	0.0	0.0
78	0.7	0.0	0.0	0.0	5.9	0.0	0.0	0.1	0.1	0.0	0.0	0.0
79	0.7	0.0	0.0	0.0	5.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0
80	0.7	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0
81	0.7	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0
82	0.7	0.0	0.0	0.0	5.4	0.0	0.0	0.1	0.1	0.0	0.0	0.0
83	0.7	0.0	0.0	0.0	5.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
84	0.7	0.0	0.0	0.0	5.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0
85	0.7	0.0	0.0	0.0	4.8	0.0	0.0	0.1	0.1	0.0	0.0	0.0
86	0.7	0.0	0.0	0.0	4.7	0.0	0.0	0.1	0.1	0.0	0.0	0.0
87	0.6	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
88	0.6	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
89	0.6	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0
90	0.6	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
91	0.6	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
92	0.6	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
93	0.6	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0
94	0.6	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
95	0.6	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0
96	0.6	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.2	0.0	0.0	0.0
97	0.6	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
98	0.6	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0
99	0.6	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
100	0.6	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0

CURRENT PCLTF STATUTE

TABLE 1- 9B: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
10	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
11	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0
12	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0
13	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.0
14	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.4	0.0	0.0	0.0
15	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.5	0.0	0.0	0.0
16	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.6	0.0	0.0	0.0
17	0.4	0.0	0.0	0.0	0.7	0.0	0.0	0.1	0.6	0.0	0.0	0.0
18	0.4	0.0	0.0	0.0	0.5	0.0	0.0	0.2	0.6	0.0	0.0	0.0
19	0.4	0.0	0.0	0.0	0.7	0.0	0.1	0.5	0.7	0.0	0.0	0.0
20	0.5	0.0	0.0	0.0	0.8	0.0	0.0	0.4	0.7	0.0	0.0	0.0
21	0.5	0.0	0.0	0.0	0.8	0.0	0.0	0.4	0.8	0.0	0.0	0.0
22	0.5	0.0	0.0	0.0	1.0	0.0	0.0	0.4	0.8	0.0	0.0	0.0
23	0.5	0.0	0.0	0.0	0.8	0.0	0.0	0.3	0.8	0.0	0.0	0.0
24	0.6	0.0	0.0	0.0	1.2	0.0	0.0	0.3	0.9	0.0	0.0	0.0
25	0.6	0.0	0.0	0.0	0.8	0.0	0.0	0.3	0.9	0.0	0.0	0.0
26	0.6	0.0	0.0	0.0	0.9	0.0	0.0	0.3	0.9	0.0	0.0	0.0
27	0.6	0.0	0.0	0.0	0.9	0.0	0.0	0.3	1.0	0.0	0.0	0.0
28	0.6	0.0	0.0	0.0	1.0	0.0	0.0	0.3	1.0	0.0	0.0	0.0
29	0.6	0.0	0.0	0.0	0.9	0.0	0.0	0.3	1.0	0.0	0.0	0.0
30	0.7	0.0	0.0	0.0	1.4	0.0	0.0	0.3	1.0	0.0	0.0	0.0
31	0.7	0.0	0.0	0.0	1.2	0.0	0.0	0.4	1.1	0.0	0.0	0.0
32	0.7	0.0	0.0	0.0	1.2	0.0	0.0	0.4	1.1	0.0	0.0	0.0
33	0.7	0.0	0.0	0.0	1.4	0.0	0.1	0.5	1.0	0.0	0.0	0.0
34	0.6	0.1	0.0	0.0	1.3	0.0	0.1	0.5	1.0	0.1	0.0	0.0
35	0.6	0.1	0.0	0.0	1.5	0.0	0.1	0.5	1.0	0.1	0.0	0.0
36	0.6	0.1	0.0	0.0	1.4	0.0	0.1	0.6	0.9	0.2	0.0	0.0
37	0.6	0.1	0.0	0.0	1.5	0.2	0.1	0.6	0.9	0.2	0.0	0.0
38	0.6	0.2	0.0	0.0	2.0	0.1	0.1	0.5	0.9	0.3	0.0	0.0
39	0.5	0.2	0.0	0.0	1.6	0.1	0.1	0.5	0.9	0.3	0.0	0.0
40	0.5	0.2	0.0	0.0	1.6	0.1	0.1	0.5	0.8	0.4	0.0	0.0
41	0.5	0.3	0.0	0.0	2.1	0.2	0.1	0.5	0.8	0.4	0.0	0.0
42	0.5	0.3	0.0	0.0	2.0	0.3	0.1	0.5	0.8	0.5	0.0	0.0
43	0.5	0.3	0.0	0.0	1.7	0.7	0.1	0.5	0.8	0.5	0.0	0.0
44	0.5	0.3	0.0	0.0	1.7	0.5	0.1	0.5	0.8	0.5	0.0	0.0
45	0.4	0.4	0.0	0.0	1.7	0.6	0.1	0.5	0.7	0.6	0.0	0.0
46	0.4	0.4	0.0	0.0	1.6	0.7	0.1	0.5	0.7	0.6	0.0	0.0
47	0.4	0.4	0.0	0.0	1.6	0.8	0.1	0.5	0.7	0.6	0.0	0.0
48	0.4	0.4	0.0	0.0	1.6	1.0	0.1	0.5	0.7	0.7	0.0	0.0
49	0.4	0.4	0.0	0.0	1.6	0.9	0.1	0.5	0.7	0.7	0.0	0.0
50	0.4	0.5	0.0	0.0	1.9	1.3	0.1	0.5	0.7	0.7	0.0	0.0

CURRENT PCLTF STATUTE

TABLE 1- 9B: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.4	0.5	0.0	0.0	1.9	1.2	0.1	0.5	0.7	0.8	0.0	0.0
52	0.4	0.5	0.0	0.0	2.2	1.1	0.1	0.5	0.7	0.8	0.0	0.0
53	0.4	0.5	0.0	0.0	2.2	1.1	0.1	0.5	0.7	0.8	0.0	0.0
54	0.4	0.5	0.0	0.0	2.2	1.1	0.1	0.5	0.7	0.8	0.0	0.0
55	0.4	0.5	0.0	0.0	2.2	1.2	0.1	0.5	0.7	0.9	0.0	0.0
56	0.4	0.6	0.0	0.0	2.2	1.4	0.1	0.5	0.7	0.9	0.0	0.0
57	0.4	0.6	0.0	0.0	2.1	1.4	0.1	0.6	0.7	0.9	0.0	0.0
58	0.4	0.6	0.0	0.0	2.1	1.4	0.1	0.6	0.7	0.9	0.0	0.0
59	0.4	0.6	0.0	0.0	2.4	1.4	0.1	0.6	0.7	1.0	0.0	0.0
60	0.4	0.6	0.0	0.0	2.0	1.4	0.1	0.6	0.7	1.0	0.0	0.0
61	0.4	0.6	0.0	0.0	2.0	1.2	0.1	0.6	0.6	1.0	0.0	0.0
62	0.4	0.6	0.0	0.0	2.2	1.6	0.1	0.6	0.7	1.0	0.0	0.0
63	0.4	0.7	0.0	0.0	2.1	1.9	0.1	0.6	0.6	1.1	0.0	0.0
64	0.3	0.7	0.0	0.0	2.1	2.5	0.1	0.6	0.7	1.1	0.0	0.0
65	0.3	0.7	0.0	0.0	2.1	2.3	0.1	0.6	0.7	1.1	0.0	0.0
66	0.3	0.7	0.0	0.0	2.1	2.3	0.1	0.6	0.7	1.1	0.0	0.0
67	0.3	0.7	0.0	0.0	2.0	2.3	0.1	0.6	0.7	1.1	0.0	0.0
68	0.3	0.7	0.0	0.0	2.1	2.2	0.1	0.6	0.6	1.2	0.0	0.0
69	0.3	0.7	0.0	0.0	2.1	2.1	0.1	0.6	0.6	1.2	0.0	0.0
70	0.3	0.7	0.0	0.0	2.1	2.2	0.1	0.6	0.6	1.2	0.0	0.0
71	0.3	0.8	0.0	0.0	2.1	2.2	0.1	0.6	0.6	1.2	0.0	0.0
72	0.3	0.8	0.0	0.0	2.1	2.3	0.1	0.6	0.6	1.3	0.0	0.0
73	0.3	0.8	0.0	0.0	2.1	2.3	0.1	0.6	0.6	1.3	0.0	0.0
74	0.3	0.8	0.0	0.0	2.2	2.4	0.1	0.6	0.6	1.3	0.0	0.0
75	0.3	0.8	0.0	0.0	2.1	2.4	0.1	0.6	0.6	1.3	0.0	0.0
76	0.3	0.8	0.0	0.0	2.2	2.4	0.1	0.6	0.6	1.4	0.0	0.0
77	0.3	0.8	0.0	0.0	2.2	2.4	0.1	0.6	0.6	1.4	0.0	0.0
78	0.3	0.8	0.0	0.0	2.2	2.4	0.1	0.6	0.6	1.4	0.0	0.0
79	0.3	0.9	0.0	0.0	2.1	2.6	0.1	0.6	0.6	1.4	0.0	0.0
80	0.3	0.9	0.0	0.0	2.1	2.6	0.1	0.6	0.6	1.4	0.0	0.0
81	0.3	0.9	0.0	0.0	2.1	2.7	0.1	0.6	0.6	1.5	0.0	0.0
82	0.3	0.9	0.0	0.0	2.1	2.6	0.1	0.6	0.6	1.5	0.0	0.0
83	0.3	0.9	0.0	0.0	2.1	2.7	0.1	0.6	0.5	1.5	0.0	0.0
84	0.3	0.9	0.0	0.0	2.1	2.6	0.1	0.6	0.5	1.5	0.0	0.0
85	0.3	0.9	0.0	0.0	2.1	2.5	0.1	0.6	0.5	1.5	0.0	0.0
86	0.3	0.9	0.0	0.0	2.1	2.7	0.1	0.7	0.5	1.6	0.0	0.0
87	0.2	0.9	0.0	0.0	2.1	2.7	0.1	0.7	0.5	1.6	0.0	0.0
88	0.2	1.0	0.0	0.0	2.1	2.9	0.1	0.7	0.5	1.6	0.0	0.0
89	0.2	1.0	0.0	0.0	2.1	2.8	0.1	0.7	0.5	1.6	0.0	0.0
90	0.2	1.0	0.0	0.0	2.1	2.9	0.1	0.7	0.5	1.6	0.0	0.0
91	0.2	1.0	0.0	0.0	2.1	2.9	0.1	0.7	0.5	1.7	0.0	0.0
92	0.2	1.0	0.0	0.0	2.0	2.9	0.1	0.7	0.5	1.7	0.0	0.0
93	0.2	1.0	0.0	0.0	2.0	2.9	0.1	0.7	0.5	1.7	0.0	0.0
94	0.2	1.0	0.0	0.0	2.0	2.9	0.1	0.7	0.5	1.7	0.0	0.0
95	0.2	1.0	0.0	0.0	2.0	2.9	0.1	0.7	0.5	1.8	0.0	0.0
96	0.2	1.0	0.0	0.0	2.0	3.2	0.1	0.7	0.5	1.8	0.0	0.0
97	0.2	1.0	0.0	0.0	2.0	2.9	0.1	0.7	0.5	1.8	0.0	0.0
98	0.2	1.0	0.0	0.0	2.1	3.2	0.1	0.7	0.5	1.8	0.0	0.0
99	0.2	1.0	0.0	0.0	2.0	3.1	0.1	0.7	0.5	1.8	0.0	0.0
100	0.2	1.1	0.0	0.0	2.0	3.1	0.1	0.7	0.5	1.8	0.0	0.0

CURRENT PCLTF STATUTE

TABLE 1- 9C: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	0.4	0.0	0.0	0.1	3.4	0.0	0.2	1.5	0.3	0.0	0.0	0.0
2	1.0	0.0	0.0	0.1	8.9	0.0	0.2	2.1	0.8	0.0	0.0	0.0
3	1.5	0.0	0.0	0.1	18.7	0.0	0.5	4.5	1.2	0.0	0.0	0.0
4	1.5	0.0	0.0	0.1	24.4	0.0	0.7	6.3	1.6	0.0	0.0	0.0
5	1.5	0.0	0.0	0.1	27.5	0.0	0.8	7.4	1.8	0.0	0.0	0.0
6	1.4	0.0	0.0	0.1	31.4	0.0	0.9	8.4	1.8	0.0	0.0	0.0
7	0.9	0.0	0.0	0.0	26.0	0.0	1.0	8.7	1.8	0.0	0.0	0.0
8	0.9	0.0	0.0	0.0	22.2	0.0	0.9	8.5	1.8	0.0	0.0	0.0
9	0.9	0.0	0.0	0.1	20.3	0.0	1.1	9.7	1.8	0.0	0.1	0.0
10	0.9	0.0	0.0	0.1	19.2	0.0	1.2	10.5	1.9	0.0	0.1	0.0
11	0.9	0.0	0.0	0.1	18.6	0.0	1.3	11.7	1.9	0.0	0.1	0.0
12	0.9	0.0	0.1	0.1	18.8	0.0	1.5	13.1	2.0	0.0	0.1	0.0
13	0.9	0.0	0.1	0.1	19.8	0.0	1.5	13.9	2.0	0.0	0.1	0.0
14	0.9	0.0	0.1	0.1	21.6	0.0	1.6	14.5	2.0	0.0	0.1	0.0
15	0.9	0.0	0.1	0.1	22.4	0.0	1.7	15.6	2.1	0.0	0.2	0.0
16	0.9	0.0	0.1	0.1	22.6	0.0	1.8	16.0	2.1	0.0	0.2	0.0
17	0.9	0.0	0.1	0.1	23.6	0.0	1.8	16.6	2.1	0.0	0.2	0.0
18	0.9	0.0	0.1	0.1	25.0	0.0	1.9	16.7	2.2	0.0	0.2	0.0
19	0.9	0.0	0.1	0.1	26.3	0.0	1.9	17.1	2.2	0.0	0.2	0.0
20	0.9	0.0	0.1	0.1	27.2	0.0	1.9	17.5	2.2	0.0	0.2	0.0
21	0.9	0.0	0.1	0.1	28.2	0.0	2.1	18.5	2.3	0.0	0.2	0.0
22	0.9	0.0	0.1	0.1	29.8	0.0	2.1	19.2	2.3	0.0	0.2	0.0
23	0.9	0.0	0.1	0.1	30.7	0.0	2.2	19.6	2.3	0.0	0.2	0.0
24	0.9	0.0	0.1	0.1	30.8	0.0	2.2	19.7	2.3	0.0	0.2	0.0
25	0.9	0.0	0.1	0.1	31.5	0.0	2.2	20.2	2.3	0.0	0.2	0.0
26	0.9	0.0	0.1	0.1	32.6	0.0	2.3	20.4	2.4	0.0	0.2	0.0
27	0.9	0.0	0.1	0.1	33.6	0.0	2.3	20.7	2.4	0.0	0.2	0.0
28	0.9	0.0	0.1	0.1	34.3	0.0	2.3	20.9	2.4	0.0	0.2	0.0
29	0.9	0.0	0.1	0.1	36.0	0.0	2.4	21.5	2.4	0.0	0.2	0.0
30	0.9	0.0	0.1	0.1	36.6	0.0	2.4	21.9	2.4	0.0	0.3	0.0
31	0.9	0.0	0.1	0.1	37.0	0.0	2.5	22.1	2.3	0.0	0.3	0.0
32	0.7	0.0	0.1	0.1	37.7	0.0	2.5	22.3	2.0	0.0	0.4	0.0
33	0.5	0.0	0.2	0.1	38.0	0.0	2.5	22.6	1.8	0.0	0.4	0.0
34	0.4	0.0	0.2	0.1	37.7	0.0	2.5	22.9	1.6	0.0	0.5	0.0
35	0.3	0.0	0.2	0.1	38.0	0.0	2.6	22.9	1.5	0.0	0.5	0.0
36	0.3	0.0	0.2	0.1	38.3	0.0	2.6	23.1	1.5	0.0	0.5	0.0
37	0.3	0.0	0.2	0.1	38.7	0.0	2.6	23.2	1.5	0.0	0.5	0.0
38	0.2	0.0	0.2	0.1	39.0	0.0	2.6	23.5	1.5	0.0	0.5	0.0
39	0.2	0.0	0.2	0.1	39.2	0.0	2.6	23.7	1.5	0.0	0.5	0.0
40	0.2	0.0	0.2	0.1	40.0	0.0	2.7	23.8	1.5	0.0	0.5	0.0
41	0.2	0.0	0.2	0.1	40.5	0.0	2.7	24.1	1.5	0.0	0.5	0.0
42	0.2	0.0	0.2	0.1	40.5	0.0	2.7	24.2	1.5	0.0	0.5	0.0
43	0.2	0.0	0.2	0.1	41.2	0.0	2.8	24.4	1.5	0.0	0.6	0.0
44	0.2	0.0	0.2	0.1	41.5	0.0	2.8	24.6	1.5	0.0	0.6	0.0
45	0.2	0.0	0.2	0.1	41.7	0.0	2.8	24.9	1.5	0.0	0.6	0.0
46	0.2	0.0	0.2	0.0	41.9	0.0	2.8	25.4	1.5	0.0	0.6	0.0
47	0.2	0.0	0.2	0.0	42.3	0.0	2.8	25.5	1.5	0.0	0.6	0.0
48	0.2	0.0	0.2	0.1	42.8	0.0	2.9	25.6	1.5	0.0	0.6	0.0
49	0.2	0.0	0.2	0.0	42.9	0.0	2.9	26.3	1.5	0.0	0.6	0.0
50	0.2	0.0	0.2	0.0	43.1	0.0	2.9	26.2	1.5	0.0	0.6	0.0

CURRENT PCLTF STATUTE

TABLE 1- 9C: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.2	0.0	0.2	0.0	43.2	0.0	3.0	27.1	1.5	0.0	0.6	0.0
52	0.2	0.0	0.2	0.0	43.2	0.0	3.0	26.6	1.5	0.0	0.6	0.0
53	0.2	0.0	0.2	0.0	43.5	0.0	3.0	26.8	1.5	0.0	0.6	0.0
54	0.2	0.0	0.2	0.0	44.0	0.0	3.0	26.7	1.5	0.0	0.6	0.0
55	0.2	0.0	0.2	0.0	43.9	0.0	3.0	26.8	1.5	0.0	0.6	0.0
56	0.2	0.0	0.2	0.0	44.4	0.0	3.0	26.9	1.6	0.0	0.6	0.0
57	0.2	0.0	0.2	0.0	44.6	0.0	3.0	27.0	1.6	0.0	0.6	0.0
58	0.2	0.0	0.2	0.0	44.7	0.0	3.0	27.2	1.6	0.0	0.6	0.0
59	0.2	0.0	0.2	0.0	44.8	0.0	3.1	27.5	1.6	0.0	0.6	0.0
60	0.2	0.0	0.2	0.0	44.8	0.0	3.1	27.6	1.6	0.0	0.6	0.0
61	0.1	0.0	0.2	0.0	44.8	0.0	3.1	27.8	1.6	0.0	0.6	0.0
62	0.1	0.0	0.2	0.0	45.1	0.0	3.1	28.1	1.6	0.0	0.6	0.0
63	0.1	0.0	0.2	0.0	45.2	0.0	3.1	28.2	1.6	0.0	0.6	0.0
64	0.1	0.0	0.2	0.0	45.0	0.0	3.2	28.3	1.6	0.0	0.6	0.0
65	0.1	0.0	0.2	0.0	45.1	0.0	3.2	28.7	1.6	0.0	0.6	0.0
66	0.1	0.0	0.2	0.0	45.4	0.0	3.2	28.9	1.6	0.0	0.6	0.0
67	0.1	0.0	0.2	0.0	45.5	0.0	3.3	29.1	1.6	0.0	0.6	0.0
68	0.1	0.0	0.2	0.0	45.8	0.0	3.3	29.1	1.6	0.0	0.6	0.0
69	0.1	0.0	0.2	0.0	45.6	0.0	3.3	29.4	1.6	0.0	0.6	0.0
70	0.1	0.0	0.2	0.0	45.6	0.0	3.3	29.4	1.6	0.0	0.6	0.0
71	0.1	0.0	0.2	0.0	45.9	0.0	3.3	29.4	1.6	0.0	0.6	0.0
72	0.1	0.0	0.2	0.0	45.9	0.0	3.3	29.6	1.6	0.0	0.6	0.0
73	0.1	0.0	0.2	0.0	46.0	0.0	3.4	29.8	1.6	0.0	0.6	0.0
74	0.1	0.0	0.2	0.0	46.1	0.0	3.4	29.8	1.6	0.0	0.6	0.0
75	0.1	0.0	0.2	0.0	46.0	0.0	3.4	29.9	1.6	0.0	0.6	0.0
76	0.1	0.0	0.2	0.0	46.2	0.0	3.5	30.3	1.6	0.0	0.7	0.0
77	0.1	0.0	0.2	0.0	46.2	0.0	3.5	30.4	1.6	0.0	0.7	0.0
78	0.1	0.0	0.2	0.0	46.2	0.0	3.5	30.5	1.6	0.0	0.7	0.0
79	0.1	0.0	0.2	0.0	46.1	0.0	3.5	30.6	1.6	0.0	0.7	0.0
80	0.1	0.0	0.2	0.0	46.2	0.0	3.5	30.7	1.6	0.0	0.7	0.0
81	0.1	0.0	0.2	0.0	46.4	0.0	3.5	30.7	1.6	0.0	0.7	0.0
82	0.1	0.0	0.2	0.0	46.2	0.0	3.5	30.9	1.6	0.0	0.7	0.0
83	0.1	0.0	0.2	0.0	46.3	0.0	3.5	31.0	1.6	0.0	0.7	0.0
84	0.1	0.0	0.2	0.0	46.4	0.0	3.5	31.1	1.6	0.0	0.7	0.0
85	0.1	0.0	0.2	0.0	46.5	0.0	3.5	31.2	1.6	0.0	0.7	0.0
86	0.1	0.0	0.2	0.0	46.5	0.0	3.5	31.3	1.6	0.0	0.7	0.0
87	0.1	0.0	0.2	0.0	46.3	0.0	3.6	31.6	1.6	0.0	0.7	0.0
88	0.1	0.0	0.2	0.0	46.4	0.0	3.6	31.7	1.6	0.0	0.7	0.0
89	0.1	0.0	0.2	0.0	46.4	0.0	3.6	31.9	1.6	0.0	0.7	0.0
90	0.1	0.0	0.2	0.0	46.3	0.0	3.6	32.1	1.6	0.0	0.7	0.0
91	0.1	0.0	0.2	0.0	46.3	0.0	3.7	32.2	1.6	0.0	0.7	0.0
92	0.1	0.0	0.2	0.0	46.3	0.0	3.7	32.3	1.6	0.0	0.7	0.0
93	0.1	0.0	0.2	0.0	46.3	0.0	3.7	32.4	1.6	0.0	0.7	0.0
94	0.1	0.0	0.2	0.0	46.3	0.0	3.7	32.4	1.6	0.0	0.7	0.0
95	0.1	0.0	0.2	0.0	46.2	0.0	3.7	32.4	1.6	0.0	0.7	0.0
96	0.1	0.0	0.2	0.0	46.3	0.0	3.7	32.5	1.6	0.0	0.7	0.0
97	0.1	0.0	0.2	0.0	46.2	0.0	3.7	32.8	1.6	0.0	0.7	0.0
98	0.1	0.0	0.2	0.0	46.2	0.0	3.8	33.3	1.6	0.0	0.7	0.0
99	0.1	0.0	0.2	0.0	46.0	0.0	3.8	33.3	1.6	0.0	0.7	0.0
100	0.1	0.0	0.2	0.0	46.1	0.0	3.8	33.3	1.6	0.0	0.7	0.0

CURRENT PCLTF STATUTE

TABLE 1-10A: ALLOCATION OF CLAIMS COSTS BY TYPE AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	104.6	0.0	0.0	0.0	1.2	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.5	0.0	0.0	0.0
3	762.5	0.0	0.0	0.0	10.5	0.0	0.0	0.0	18.2	0.0	0.0	0.0	3.6	0.0	0.0	0.1
4	681.4	0.0	0.0	0.0	10.3	0.0	0.0	0.0	22.7	0.0	0.0	0.0	6.0	0.0	0.0	0.4
5	1267.2	0.0	0.0	0.0	11.2	0.0	0.0	0.0	27.1	0.0	0.0	0.0	5.9	0.0	0.0	0.3
6	1107.7	0.0	0.0	0.0	6.3	0.0	0.0	0.0	23.8	0.0	0.0	0.0	5.8	0.0	0.0	0.3
7	233.1	0.0	0.0	0.0	6.5	0.0	0.4	0.0	9.5	0.0	0.0	0.0	3.8	0.0	0.0	0.3
8	98.6	0.0	0.0	0.0	1.6	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.8	0.0	0.0	0.1
9	122.5	0.0	0.0	0.0	3.1	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.8	0.0	0.0	0.1
10	210.2	0.0	0.0	0.0	1.7	0.0	0.0	0.0	4.9	0.0	0.0	0.0	1.0	0.0	0.0	0.0
11	101.1	0.0	0.0	0.0	1.8	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.7	0.0	0.0	0.0
12	250.6	0.0	0.0	0.0	2.1	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0
13	135.2	0.0	0.0	0.0	2.1	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.7	0.0	0.0	0.0
14	174.9	0.0	0.0	0.0	4.4	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.7	0.0	0.0	0.0
15	145.8	0.0	0.0	0.0	1.3	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.6	0.0	0.0	0.0
16	128.1	0.0	0.0	0.0	3.6	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.8	0.0	0.0	0.0
17	40.7	0.0	0.0	0.0	2.5	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0
18	208.6	0.0	0.0	0.0	1.2	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.7	0.0	0.0	0.0
19	82.6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.7	0.0	0.0	0.0
20	156.8	0.0	0.0	0.0	1.3	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
21	65.6	0.0	0.0	0.0	1.5	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0
22	97.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.5	0.0	0.0	0.0
23	33.3	0.0	0.0	0.0	2.2	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.4	0.0	0.0	0.0
24	98.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.4	0.0	0.0	0.0
25	129.2	0.0	0.0	0.0	0.6	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.3	0.0	0.0	0.1
26	19.3	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.2	0.0	0.0	0.0
27	30.2	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.3	0.0	0.0	0.0
28	68.5	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.3	0.0	0.0	0.0
29	64.4	0.0	0.0	0.0	0.7	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0
30	114.6	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.3	0.0	0.0	0.0
31	202.5	0.0	0.0	0.0	1.1	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.3	0.0	0.0	0.0
32	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0
33	76.1	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3	0.0	0.0	0.0
34	4.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0
35	19.4	0.0	0.0	0.0	0.2	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
36	59.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	16.6	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0
39	16.4	0.0	0.0	0.0	2.6	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
40	10.7	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
41	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	101.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	28.7	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
45	33.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	17.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CURRENT PCLTF STATUTE

TABLE 1-10A: ALLOCATION OF CLAIMS COSTS BY TYPE AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	15.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	60.4	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
72	12.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	5.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0
74	40.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	15.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CURRENT PCLTF STATUTE

TABLE 1-10B: ALLOCATION OF CLAIMS COSTS BY TYPE AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	20.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	8.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	25.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
21	0.0	20.3	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
28	0.0	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	8.1	0.0	0.0	0.0	0.2	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	27.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
33	0.0	1.7	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
34	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
35	0.0	5.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	54.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
41	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	36.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.0
45	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
46	0.0	8.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.1	0.0	0.0
47	0.0	36.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	73.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.1	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	36.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.1	0.0	0.0

CURRENT PCLTF STATUTE

TABLE 1-10B: ALLOCATION OF CLAIMS COSTS BY TYPE AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.0	11.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
52	0.0	0.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0
53	0.0	91.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.1	0.0	0.0
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	8.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.0
56	0.0	0.9	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0
58	0.0	37.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
59	0.0	27.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
60	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	0.0	5.5	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0
63	0.0	38.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0
64	0.0	1.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
66	0.0	21.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0
67	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.0	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0
71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	0.0	102.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0
73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
74	0.0	11.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0
75	0.0	36.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
79	0.0	2.6	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
81	0.0	56.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	57.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	61.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
91	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	0.0	7.3	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
93	0.0	85.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
99	0.0	5.3	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CURRENT PCLTF STATUTE

TABLE 1-10C: ALLOCATION OF CLAIMS COSTS BY TYPE AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	58.3	0.0	0.0	0.0	1.6	0.0	0.0	0.0	2.0	0.0	0.3	0.0	0.7	0.0	0.0	0.2
2	93.4	0.0	34.0	0.0	1.0	0.0	0.0	0.0	3.2	0.0	0.3	0.0	0.6	0.0	0.0	0.0
3	254.0	0.0	0.0	0.0	6.3	0.0	0.0	0.0	10.5	0.0	0.0	0.0	1.9	0.0	0.0	0.3
4	348.1	0.0	0.0	0.0	4.2	0.0	0.0	0.0	10.4	0.0	0.0	0.0	2.1	0.0	0.0	0.3
5	330.8	0.0	0.0	0.0	2.2	0.0	0.0	0.0	8.9	0.0	0.0	0.0	2.0	0.0	0.0	0.2
6	282.6	0.0	0.0	0.0	5.8	0.0	0.0	0.0	6.4	0.0	0.0	0.0	1.3	0.0	0.0	0.2
7	54.8	0.0	0.0	0.0	1.9	0.0	0.1	0.0	5.6	0.0	0.3	0.0	1.4	0.0	0.0	0.2
8	6.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.2	0.0	0.0	0.0
9	170.4	0.0	0.0	0.0	0.5	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.2	0.0	0.0	0.1
10	243.8	0.0	0.0	0.0	4.4	0.0	0.0	0.0	5.8	0.0	0.0	0.0	0.5	0.0	0.0	0.0
11	259.5	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.6	0.0	0.0	0.3
12	67.6	0.0	0.0	0.0	0.6	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.4	0.0	0.0	0.2
13	51.8	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.4	0.0	0.0	0.3
14	30.2	0.0	0.0	0.0	1.4	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.4	0.0	0.0	0.2
15	151.2	0.0	0.0	0.0	0.6	0.0	0.0	0.0	4.0	0.0	0.1	0.0	0.4	0.0	0.0	0.3
16	86.8	0.0	0.0	0.0	3.2	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.4	0.0	0.0	0.2
17	188.9	0.0	0.0	0.0	1.1	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.4	0.0	0.0	0.2
18	75.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.5	0.0	0.0	0.3
19	165.2	0.0	0.0	0.0	1.6	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.4	0.0	0.0	0.2
20	179.5	0.0	0.0	0.0	0.9	0.0	0.0	0.0	5.8	0.0	0.0	0.0	0.5	0.0	0.0	0.2
21	174.8	0.0	0.0	0.0	0.8	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.4	0.0	0.0	0.3
22	51.5	0.0	0.0	0.0	2.2	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.5	0.0	0.0	0.3
23	24.9	0.0	0.0	0.0	2.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.4	0.0	0.0	0.2
24	93.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.4	0.0	0.0	0.2
25	80.1	0.0	0.0	0.0	1.6	0.0	0.2	0.0	3.6	0.0	0.0	0.0	0.5	0.0	0.0	0.3
26	23.4	0.0	0.0	0.0	1.8	0.0	0.1	0.0	2.1	0.0	0.0	0.0	0.5	0.0	0.0	0.2
27	191.3	0.0	0.0	0.0	0.7	0.0	0.0	0.0	5.1	0.0	0.3	0.0	0.3	0.0	0.0	0.2
28	88.7	0.0	0.0	0.0	3.4	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.4	0.0	0.0	0.2
29	35.3	0.0	0.0	0.0	2.9	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.4	0.0	0.0	0.3
30	452.8	0.0	0.0	0.0	3.9	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.4	0.0	0.0	0.1
31	53.0	0.0	0.0	0.0	0.2	0.0	0.3	0.0	0.5	0.0	0.0	0.0	0.2	0.0	0.0	0.2
32	52.3	0.0	0.0	0.0	1.3	0.0	0.5	0.0	0.8	0.0	0.0	0.0	0.4	0.0	0.0	0.2
33	26.8	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.2	0.0	0.0	0.1
34	11.3	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1
35	25.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.1
36	6.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0
37	65.9	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
38	31.2	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.2	0.0	0.0	0.1
39	34.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.2	0.0	0.0	0.1
40	0.2	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1
41	0.6	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1
42	1.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
43	19.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
44	55.4	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
46	84.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
47	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	29.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.1	0.0	0.0	0.1
49	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
50	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CURRENT PCLTF STATUTE

TABLE 1-10C: ALLOCATION OF CLAIMS COSTS BY TYPE AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.1
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
53	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	21.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	83.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	134.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	30.7	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	4.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	49.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	15.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	17.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87	31.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	6.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CURRENT PCLTF STATUTE

TABLE 1-11: SUMMARY OF FACILITY/FIRM BANKRUPTCY STATUS BY YEAR AND BY NET WORTH FOR NON-GOVERNMENT OWNED FACILITIES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	FIRM NET WORTH IN 1982 DOLLARS											
	LESS THAN 10 MILLION			10 TO 100 MILLION			100 TO 1000 MILLION			GREATER THAN 1000 MILLION		
	SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES	
YEAR	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)
1	243.9	11.59	(4.76)	109.8	0.10	(0.09)	223.8	0.48	(0.22)	341.2	0.59	(0.17)
2	232.3	2.86	(1.22)	109.7	0.28	(0.26)	223.3	0.34	(0.16)	340.6	1.00	(0.30)
3	229.4	9.52	(4.14)	109.4	0.55	(0.50)	222.9	0.52	(0.23)	339.6	0.72	(0.22)
4	219.9	26.97	(12.28)	108.9	1.10	(1.01)	222.4	0.72	(0.33)	338.9	0.72	(0.22)
5	193.0	24.17	(12.56)	107.8	1.34	(1.27)	221.7	0.48	(0.22)	338.1	1.17	(0.34)
6	168.8	18.93	(11.21)	106.4	1.72	(1.62)	221.3	1.38	(0.61)	337.0	0.62	(0.18)
7	150.0	17.76	(11.82)	105.3	1.34	(1.31)	221.0	1.14	(0.52)	337.5	0.83	(0.24)
8	132.8	9.14	(6.92)	104.6	0.86	(0.83)	221.3	0.72	(0.33)	339.1	1.21	(0.35)
9	124.2	7.28	(5.84)	105.0	0.72	(0.68)	222.8	0.41	(0.19)	341.4	1.86	(0.55)
10	117.3	5.10	(4.42)	105.4	0.69	(0.66)	224.7	0.34	(0.16)	342.9	0.69	(0.20)
11	112.6	6.21	(5.50)	105.8	0.83	(0.78)	226.1	1.00	(0.43)	345.9	0.83	(0.24)
12	106.8	4.62	(4.27)	105.8	0.59	(0.56)	226.9	0.66	(0.29)	347.6	1.03	(0.30)
13	102.6	4.17	(4.10)	106.3	0.69	(0.64)	228.2	0.55	(0.24)	349.7	0.76	(0.22)
14	99.0	4.03	(4.09)	106.7	0.72	(0.69)	229.5	0.59	(0.26)	351.6	1.72	(0.48)
15	95.3	4.00	(4.15)	106.7	1.07	(1.03)	230.8	0.83	(0.36)	352.7	1.34	(0.38)
16	91.8	3.45	(3.79)	106.2	0.62	(0.59)	231.3	0.55	(0.24)	354.1	0.90	(0.25)
17	88.6	2.90	(3.25)	106.4	0.76	(0.72)	232.7	0.59	(0.26)	356.0	0.69	(0.20)
18	86.0	2.69	(3.11)	106.2	0.76	(0.73)	233.4	0.31	(0.13)	357.3	0.38	(0.11)
19	83.5	2.24	(2.65)	106.3	1.14	(1.08)	234.2	0.52	(0.22)	358.8	1.03	(0.29)
20	81.6	2.48	(3.13)	105.6	0.90	(0.87)	234.8	0.62	(0.26)	359.6	0.69	(0.19)
21	79.3	2.48	(3.18)	105.0	0.72	(0.72)	235.1	0.55	(0.23)	360.4	1.00	(0.29)
22	77.0	2.28	(2.96)	104.9	0.62	(0.61)	235.8	0.59	(0.25)	360.9	0.34	(0.10)
23	74.9	1.79	(2.39)	104.7	0.55	(0.52)	235.9	0.52	(0.22)	362.0	0.69	(0.20)
24	73.3	2.14	(2.94)	104.4	0.93	(0.87)	235.9	0.66	(0.28)	362.3	0.52	(0.15)
25	71.1	1.69	(2.40)	103.8	0.72	(0.71)	236.0	0.38	(0.16)	362.6	1.28	(0.34)
26	69.5	1.66	(2.44)	103.4	0.72	(0.69)	236.2	0.72	(0.31)	362.2	0.69	(0.20)
27	68.0	1.41	(2.11)	103.0	0.76	(0.74)	236.1	0.34	(0.15)	362.7	1.24	(0.35)
28	66.7	1.28	(1.96)	102.4	0.66	(0.64)	236.3	0.76	(0.33)	362.1	1.48	(0.43)
29	65.5	1.21	(1.90)	102.0	0.38	(0.38)	236.2	0.55	(0.23)	361.4	0.38	(0.10)
30	64.4	1.17	(1.86)	101.9	0.55	(0.53)	236.2	0.72	(0.31)	361.8	1.17	(0.32)
31	63.3	1.48	(2.34)	101.7	0.62	(0.64)	236.1	0.52	(0.22)	361.0	0.83	(0.23)
32	62.0	1.69	(2.79)	101.3	0.59	(0.58)	236.0	1.07	(0.45)	360.9	0.86	(0.25)
33	60.3	1.14	(1.90)	100.9	0.62	(0.62)	235.4	0.62	(0.27)	360.7	1.03	(0.28)
34	59.3	0.90	(1.47)	100.4	0.52	(0.53)	235.3	1.10	(0.48)	360.4	1.38	(0.39)
35	58.5	0.97	(1.60)	100.1	0.48	(0.50)	234.4	0.69	(0.29)	359.6	0.66	(0.18)
36	57.6	1.21	(2.01)	99.9	0.52	(0.54)	234.3	0.41	(0.18)	359.2	0.79	(0.22)
37	56.6	1.24	(2.19)	99.6	0.66	(0.65)	234.3	0.45	(0.19)	359.2	0.62	(0.17)
38	55.5	1.00	(1.81)	99.2	0.34	(0.34)	234.2	0.48	(0.21)	359.2	0.59	(0.17)
39	54.6	0.76	(1.38)	99.1	0.59	(0.59)	234.0	0.59	(0.24)	359.2	0.86	(0.25)
40	53.9	0.66	(1.24)	98.7	0.55	(0.55)	233.7	0.24	(0.10)	358.8	0.52	(0.14)
41	53.2	1.03	(2.01)	98.2	0.69	(0.71)	233.8	0.69	(0.29)	358.8	0.83	(0.23)
42	52.3	0.90	(1.73)	97.7	0.66	(0.65)	233.5	0.45	(0.19)	358.3	1.03	(0.29)
43	51.4	0.90	(1.69)	97.2	0.31	(0.33)	233.3	0.55	(0.23)	357.6	1.10	(0.29)
44	50.6	0.48	(1.01)	97.0	0.34	(0.35)	233.1	0.86	(0.36)	357.3	0.97	(0.28)
45	50.2	0.45	(0.97)	96.8	0.38	(0.39)	232.7	0.52	(0.22)	356.8	0.83	(0.24)
46	49.8	0.38	(0.71)	96.5	0.41	(0.44)	232.4	0.17	(0.07)	357.1	0.48	(0.13)
47	49.5	0.52	(1.09)	96.2	0.38	(0.39)	232.6	1.10	(0.46)	357.2	1.24	(0.34)
48	49.0	0.59	(1.26)	96.0	0.48	(0.52)	231.8	0.69	(0.30)	356.2	0.34	(0.10)
49	48.5	0.52	(1.05)	95.7	0.21	(0.21)	231.5	0.76	(0.32)	356.3	1.17	(0.32)
50	48.1	0.38	(0.86)	95.6	0.83	(0.85)	231.0	0.31	(0.13)	355.7	1.45	(0.41)

CURRENT PCLTF STATUTE
(CONTINUED)
TABLE 1-11: SUMMARY OF FACILITY/FIRM BANKRUPTCY STATUS BY YEAR AND BY NET WORTH FOR NON-GOVERNMENT OWNED FACILITIES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	FIRM NET WORTH IN 1982 DOLLARS											
	LESS THAN 10 MILLION			10 TO 100 MILLION			100 TO 1000 MILLION			GREATER THAN 1000 MILLION		
	SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES	
YEAR	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)
51	47.7	0.52	(1.12)	94.9	0.38	(0.43)	231.1	1.17	(0.50)	354.8	1.69	(0.48)
52	47.3	0.41	(0.92)	94.8	0.66	(0.68)	230.6	0.45	(0.19)	354.2	0.28	(0.08)
53	47.1	0.48	(1.09)	94.6	0.34	(0.38)	231.2	0.62	(0.27)	355.2	0.97	(0.28)
54	46.7	0.48	(1.02)	94.7	0.41	(0.43)	231.8	0.31	(0.13)	355.4	0.62	(0.17)
55	46.4	0.38	(0.85)	94.8	0.52	(0.55)	232.3	0.66	(0.28)	356.2	0.69	(0.20)
56	46.4	0.38	(0.79)	94.8	0.59	(0.61)	232.7	0.59	(0.25)	356.8	0.31	(0.08)
57	46.2	0.34	(0.79)	94.7	0.48	(0.52)	233.2	0.17	(0.08)	358.2	0.93	(0.25)
58	46.0	0.52	(1.21)	94.6	0.41	(0.43)	233.8	0.31	(0.13)	359.0	0.62	(0.17)
59	45.7	0.59	(1.24)	94.8	0.45	(0.48)	234.3	0.38	(0.16)	359.5	0.52	(0.15)
60	45.2	0.41	(0.99)	94.7	0.31	(0.34)	234.8	0.38	(0.16)	360.2	0.45	(0.13)
61	45.0	0.41	(0.88)	94.8	0.38	(0.42)	235.1	0.86	(0.36)	361.2	0.97	(0.26)
62	44.7	0.52	(1.15)	94.7	0.52	(0.54)	234.8	0.38	(0.16)	361.6	0.69	(0.19)
63	44.2	0.38	(0.86)	94.7	0.52	(0.55)	235.2	0.69	(0.30)	362.2	0.59	(0.16)
64	44.0	0.52	(1.12)	94.7	0.31	(0.35)	235.3	0.69	(0.30)	362.8	1.10	(0.30)
65	43.7	0.28	(0.71)	94.9	0.55	(0.57)	235.5	0.48	(0.21)	362.7	0.62	(0.18)
66	43.5	0.31	(0.72)	94.6	0.45	(0.49)	235.8	0.69	(0.29)	363.2	1.79	(0.48)
67	43.3	0.31	(0.74)	94.4	0.28	(0.29)	235.9	0.45	(0.19)	362.3	0.97	(0.27)
68	43.2	0.59	(1.45)	94.5	0.55	(0.61)	236.1	0.62	(0.25)	362.7	1.10	(0.30)
69	42.8	0.48	(1.11)	94.2	0.55	(0.61)	236.0	0.48	(0.20)	362.8	1.14	(0.29)
70	42.4	0.24	(0.62)	93.9	0.38	(0.39)	236.1	0.97	(0.41)	362.9	0.90	(0.25)
71	42.5	0.48	(1.00)	93.9	0.34	(0.38)	236.1	0.31	(0.13)	363.0	0.83	(0.22)
72	42.0	0.07	(0.13)	93.8	0.34	(0.35)	236.3	0.41	(0.18)	363.3	0.45	(0.13)
73	42.1	0.45	(1.11)	93.9	0.41	(0.46)	236.6	0.72	(0.30)	364.0	1.72	(0.47)
74	42.0	0.21	(0.51)	93.8	0.45	(0.49)	236.3	0.59	(0.24)	362.9	0.79	(0.22)
75	42.0	0.17	(0.41)	93.7	0.45	(0.48)	236.1	0.69	(0.29)	363.1	0.66	(0.18)
76	42.1	0.41	(1.09)	93.4	0.48	(0.52)	236.0	0.34	(0.15)	363.3	1.34	(0.35)
77	41.8	0.31	(0.76)	93.5	0.48	(0.55)	236.2	0.41	(0.17)	362.4	0.83	(0.23)
78	41.6	0.31	(0.79)	93.2	0.21	(0.21)	236.1	0.10	(0.04)	362.5	0.48	(0.13)
79	41.4	0.14	(0.33)	93.3	0.21	(0.21)	236.7	0.45	(0.19)	362.9	0.45	(0.12)
80	41.5	0.24	(0.61)	93.3	0.72	(0.76)	236.8	0.66	(0.27)	363.3	1.24	(0.36)
81	41.3	0.24	(0.58)	92.8	0.17	(0.19)	236.5	0.21	(0.09)	362.9	0.62	(0.17)
82	41.2	0.17	(0.48)	92.8	0.62	(0.68)	237.0	0.59	(0.24)	363.3	1.38	(0.39)
83	41.1	0.21	(0.51)	92.3	0.34	(0.37)	237.1	0.79	(0.33)	362.8	0.41	(0.11)
84	41.1	0.17	(0.40)	92.3	0.41	(0.46)	237.0	0.41	(0.17)	363.3	1.03	(0.31)
85	41.0	0.14	(0.30)	92.1	0.52	(0.57)	237.0	0.34	(0.15)	363.3	0.72	(0.20)
86	41.0	0.34	(1.05)	91.8	0.41	(0.47)	237.3	0.55	(0.22)	363.4	0.59	(0.15)
87	40.8	0.24	(0.55)	91.8	0.17	(0.21)	237.2	0.62	(0.26)	363.5	0.59	(0.16)
88	40.7	0.24	(0.65)	92.1	0.24	(0.25)	237.2	0.86	(0.37)	363.7	1.90	(0.54)
89	40.5	0.21	(0.52)	92.1	0.48	(0.55)	236.8	0.45	(0.19)	362.7	0.86	(0.24)
90	40.4	0.34	(0.79)	91.9	0.34	(0.37)	236.8	0.55	(0.24)	362.7	0.93	(0.26)
91	40.2	0.07	(0.14)	91.8	0.55	(0.58)	237.0	1.07	(0.44)	362.6	0.83	(0.23)
92	40.3	0.21	(0.59)	91.4	0.31	(0.34)	236.4	0.59	(0.25)	362.7	1.14	(0.32)
93	40.3	0.55	(1.38)	91.2	0.28	(0.30)	236.3	0.86	(0.37)	362.1	1.21	(0.34)
94	39.8	0.52	(1.25)	91.1	0.38	(0.41)	236.1	0.48	(0.21)	361.7	0.59	(0.15)
95	39.4	0.31	(0.84)	91.2	0.21	(0.24)	236.2	0.59	(0.24)	361.9	0.76	(0.22)
96	39.2	0.24	(0.57)	91.2	0.24	(0.27)	236.3	0.41	(0.17)	362.3	0.31	(0.10)
97	39.0	0.28	(0.82)	91.1	0.45	(0.51)	236.2	0.69	(0.29)	362.9	0.69	(0.18)
98	38.8	0.10	(0.26)	90.9	0.28	(0.33)	236.2	0.41	(0.18)	363.0	0.55	(0.15)
99	38.9	0.24	(0.58)	90.9	0.34	(0.40)	236.2	0.45	(0.19)	363.3	0.72	(0.20)
100	38.8	0.72	(1.67)	91.0	0.38	(0.44)	236.2	0.62	(0.26)	363.5	0.76	(0.21)

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CURRENT PCLTF STATUTE

TABLE  1-12: AVERAGE OCCURRENCE OF RELEASES FOLLOWING YEAR FACILITY OPENS
VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS  .

DETECTION OF RELEASES AT EXISTING FACILITIES:
---------------------------------------------
                                   WITHIN 50 YEARS AFTER OPENING         WITHIN 75 YEARS AFTER OPENING
                                   -----------------------------         -----------------------------
                                   PROPORTION       YEARS                PROPORTION       YEARS
                                   WITH RELEASE     AFTER OPENING        WITH RELEASE     AFTER OPENING
RELEASE TYPE                       MEAN (STD.ERR)   MEAN (STD.ERR)       MEAN (STD.ERR)   MEAN (STD.ERR)
------------                       -----------------------------         -----------------------------
INDICATING PARAMETERS ON-SITE:      0.45 ( 0.00 )    4.6 (  0.1 )         0.47 ( 0.00 )    6.5 (  0.1 )
DETECTABLE  CONC. ON-SITE    :      0.41 ( 0.00 )    7.4 (  0.1 )         0.43 ( 0.00 )    9.8 (  0.1 )
TOXIC CONC. ON-SITE          :      0.31 ( 0.00 )    7.4 (  0.1 )         0.34 ( 0.00 )   10.0 (  0.2 )
TASTE/ODOR  OFF-SITE         :      0.08 ( 0.00 )   24.9 (  0.3 )         0.10 ( 0.00 )   30.1 (  0.3 )
DETECTABLE CONC. OFF-SITE    :      0.15 ( 0.00 )   22.9 (  0.2 )         0.18 ( 0.00 )   27.4 (  0.2 )
TOXIC CONC. OFF-SITE         :      0.12 ( 0.00 )   22.4 (  0.3 )         0.14 ( 0.00 )   26.6 (  0.3 )
BATHTUB EFFECT               :      0.0  ( 0.0  )    0.0 (  0.0 )         0.0  ( 0.0  )    0.0 (  0.0 )

DETECTION OF RELEASES AT NEW FACILITIES:
----------------------------------------
                                   WITHIN 50 YEARS AFTER OPENING         WITHIN 75 YEARS AFTER OPENING
                                   -----------------------------         -----------------------------
                                   PROPORTION       YEARS                PROPORTION       YEARS
                                   WITH RELEASE     AFTER OPENING        WITH RELEASE     AFTER OPENING
RELEASE TYPE                       MEAN (STD.ERR)   MEAN (STD.ERR)       MEAN (STD.ERR)   MEAN (STD.ERR)
------------                       -----------------------------         -----------------------------
INDICATING PARAMETERS ON-SITE:      0.04 ( 0.00 )   35.4 (  1.4 )         0.07 ( 0.00 )   51.0 (  1.2 )
DETECTABLE  CONC. ON-SITE    :      0.0  ( 0.0  )    0.0 (  0.0 )         0.0  ( 0.0  )    0.0 (  0.0 )
TOXIC CONC. ON-SITE          :      0.00 ( 0.00 )   32.0 (  0.0 )         0.00 ( 0.00 )   46.0 ( 14.0 )
TASTE/ODOR  OFF-SITE         :      0.0  ( 0.0  )    0.0 (  0.0 )         0.00 ( 0.00 )   73.0 (  0.0 )
DETECTABLE CONC. OFF-SITE    :      0.0  ( 0.0  )    0.0 (  0.0 )         0.0  ( 0.0  )    0.0 (  0.0 )
TOXIC CONC. OFF-SITE         :      0.0  ( 0.0  )    0.0 (  0.0 )         0.0  ( 0.0  )    0.0 (  0.0 )
BATHTUB EFFECT               :      0.0  ( 0.0  )    0.0 (  0.0 )         0.0  ( 0.0  )    0.0 (  0.0 )

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CURRENT PCLTF STATUTE

TABLE  1-13A: CAPITAL AND O&M COSTS: (THOUSANDS OF 1982 DOLLARS)
STATISTICS ARE FOR OBSERVATIONS GENERATED FOR 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS
                                                                                    FRACTION OF TIMES
ACTION                                OBSERVATIONS     MINIMUM        MEAN      MAXIMUM   UNABLE TO ALLOCATE COST
------                                ------------     -------        ----      -------   -----------------------
MONITORING:
-----------
INDICATING PARAMETERS ON-SITE     K:             0         0.0         0.0          0.0
                                O&M:         37254         2.7         4.6          6.6          0.1739

CONSTITUENTS ON-SITE              K:             0         0.0         0.0          0.0
                                O&M:         18161         3.4         5.5          8.3          0.3568

PLUME DELIN. & TRACKING ON-SITE   K:             0         0.0         0.0          0.0
                                O&M:             0         0.0         0.0          0.0          0.0

CONSTITUENTS OFF-SITE             K:         12503        25.0        37.6         50.0
                                O&M:         12919         1.8         2.4          3.0          0.0

PLUME DELIN. & TRACKING OFF-SITE  K:             0         0.0         0.0          0.0
                                O&M:             0         0.0         0.0          0.0          0.0

RESPONSE:
---------
SURFACE SEALING                   K:         12582         6.5       276.8      18989.3
                                O&M:             0         0.0         0.0          0.0          0.0

FLUID REMOVAL & TREATMT ON-SITE   K:         12582        41.3       136.8       3837.1
                                O&M:         12582        33.0       121.9       5046.8          0.0

FLUID REMOVAL & TREATMT OFF-SITE  K:          4809         0.0       248.1       3687.2
                                O&M:          4841         0.0       255.1       4872.6          0.0

ROUTINE CARE:
-------------
POST-CLOSURE CARE                 K:             0         0.0         0.0          0.0
                                O&M:         27192         0.5         7.8        124.8          0.3580
---------------------------------------------------------------------------------------------------------------------


TABLE  1-13B: GENERATED CLAIMS (THOUSANDS OF 1982 DOLLARS)
STATISTICS ARE FOR OBSERVATIONS GENERATED FOR 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS
                                                                                   FRACTION OF         FRACTION OF
                                                                                   GENERATED CLIAMS    VALID CLAIMS
CLAIMS:                               OBSERVATIONS     MINIMUM        MEAN       MAXIMUM   NOT LEGALLY VALID   NOT COMPENSATED
-------                               ------------     -------        ----       -------   -----------------   ---------------
                   PERSONAL INJURY:           2169         4.2    281189.1    10579005.0         0.1883             0.1865

                     REAL PROPERTY:           5369         0.1      1503.2      152721.5         0.2581             0.1169

                     ECONOMIC LOSS:           2868        60.0      5849.5       45265.0         0.2747             0.1753

           NATURAL RESOURCE DAMAGE:           3698       606.7       606.5         606.7         0.0                0.0

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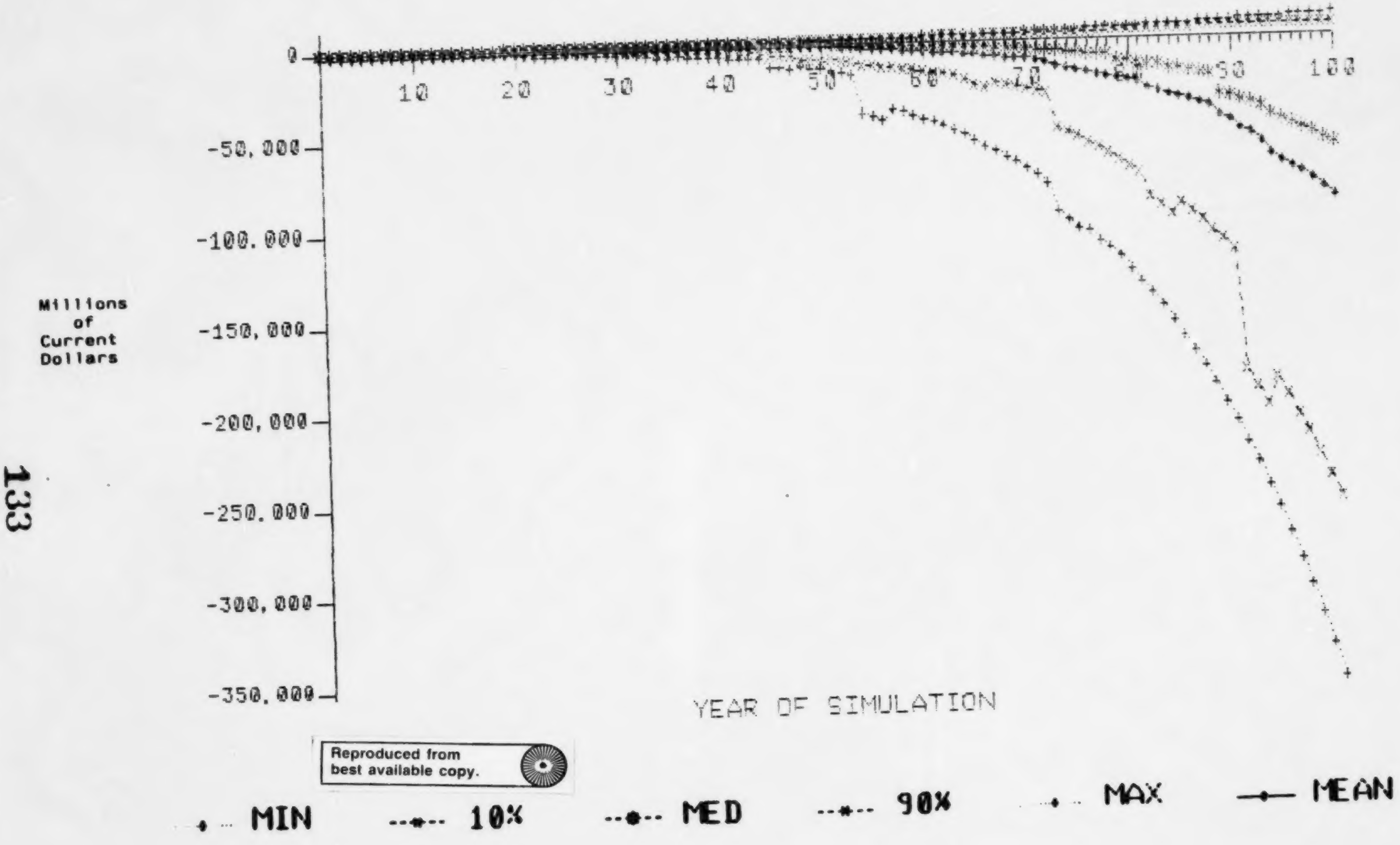
GRAPH 2-1

UNOBLIGATED FUND BALANCE IN MILLIONS OF CURRENT DOLLARS
FOR SIMULATION 2:
PARTIAL BAN OF LAND DISPOSAL



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CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 1; SUMMARY OF FACILITY POPULATION BY YEAR, PERMIT STATUS, AND QUALIFICATION STATUS
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	OPERATING FACILITIES		CLOSED FACILITIES						
			PERMITTED			NON-PERMITTED			DECONTAMINATED
YEAR	EXISTING	NEW	QUALIFICATION STATUS PENDING	QUALIFIED	UNQUALIFIED	QUALIFICATION STATUS PENDING	QUALIFIED	UNQUALIFIED	
1	938	0	1	0	0	0	0	36	7
2	852	0	6	0	0	0	0	106	19
3	772	0	17	0	0	0	0	164	30
4	685	0	41	0	0	0	0	213	43
5	604	0	68	0	0	0	0	255	56
6	572	0	94	1	0	0	0	255	61
7	545	0	109	3	3	0	0	255	67
8	522	0	118	7	10	0	0	255	71
9	502	0	110	15	26	0	0	255	74
10	484	0	98	24	44	0	0	255	78
11	466	0	86	33	62	0	0	255	81
12	448	0	79	41	75	0	0	255	85
13	431	0	74	49	86	0	0	255	88
14	414	0	72	56	95	0	0	255	91
15	398	0	70	63	103	0	0	255	94
16	384	0	67	71	110	0	0	255	96
17	369	0	65	77	117	0	0	255	99
18	356	0	62	84	125	0	0	255	101
19	343	0	59	89	133	0	0	255	103
20	330	0	56	95	140	0	0	255	105
21	317	0	55	101	146	0	0	255	107
22	307	0	52	107	153	0	0	255	110
23	297	0	49	112	159	0	0	255	111
24	286	0	47	117	165	0	0	255	113
25	276	0	44	122	171	0	0	255	115
26	268	0	41	126	177	0	0	255	117
27	259	1	39	129	182	0	0	255	118
28	249	1	39	133	186	0	0	255	120
29	241	1	38	137	191	0	0	255	121
30	232	2	37	141	196	0	0	255	122
31	223	2	37	145	199	0	0	255	124
32	216	3	36	148	203	0	0	255	125
33	208	4	34	151	208	0	0	255	126
34	202	4	33	154	212	0	0	255	127
35	194	5	31	158	216	0	0	255	129
36	188	6	29	161	220	0	0	255	130
37	183	7	27	164	223	0	0	255	131
38	177	8	25	166	227	0	0	255	132
39	172	9	24	169	230	0	0	255	133
40	166	9	23	171	233	0	0	255	134
41	161	10	22	173	236	0	0	255	135
42	154	11	24	176	238	0	0	255	136
43	149	13	23	178	241	0	0	255	137
44	143	14	23	180	244	0	0	255	138
45	139	15	23	182	246	0	0	255	139
46	135	16	22	183	249	0	0	255	140
47	131	17	19	186	252	0	0	255	140
48	127	17	18	187	254	0	0	255	141
49	123	18	17	190	257	0	0	255	142
50	120	18	16	192	259	0	0	255	143

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES
(CONTINUED)
TABLE 2- 14 SUMMARY OF FACILITY POPULATION BY YEAR, PERMIT STATUS, AND QUALIFICATION STATUS
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	OPERATING FACILITIES		CLOSED FACILITIES						
			PERMITTED			NON-PERMITTED			DECONTAMINATED
YEAR	EXISTING	NEW	QUALIFICATION STATUS PENDING	QUALIFIED	UNQUALIFIED	QUALIFICATION STATUS PENDING	QUALIFIED	UNQUALIFIED	
51	116	19	16	193	261	0	0	255	143
52	111	21	16	195	262	0	0	255	144
53	108	23	16	196	264	0	0	255	145
54	105	25	16	198	266	0	0	255	145
55	102	27	15	199	268	0	0	255	146
56	98	29	15	200	270	0	0	255	147
57	95	31	14	201	272	0	0	255	147
58	93	32	13	203	273	0	0	255	148
59	90	34	13	204	275	0	0	255	148
60	88	35	12	206	276	0	0	255	149
61	85	36	12	207	278	0	0	255	149
62	83	37	11	208	279	0	0	255	149
63	81	38	12	209	281	0	0	255	150
64	79	40	11	210	282	0	0	255	150
65	77	41	11	211	283	0	0	255	150
66	75	41	11	212	285	0	0	255	150
67	73	43	11	213	286	0	0	255	151
68	70	43	11	214	287	0	0	255	151
69	68	45	12	215	288	0	0	255	152
70	66	46	12	216	289	0	0	255	152
71	64	47	12	217	291	0	0	255	152
72	62	48	12	218	292	0	0	255	152
73	60	48	11	219	294	0	0	255	153
74	59	49	10	220	295	0	0	255	153
75	58	49	9	221	296	0	0	255	153
76	57	50	9	222	297	0	0	255	154
77	55	51	8	223	298	0	0	255	154
78	53	51	8	224	299	0	0	255	154
79	52	51	9	225	300	0	0	255	154
80	51	52	9	226	301	0	0	255	155
81	49	52	9	227	302	0	0	255	155
82	49	53	9	228	302	0	0	255	155
83	47	53	9	228	303	0	0	255	156
84	46	53	8	230	304	0	0	255	156
85	45	53	8	231	305	0	0	255	156
86	44	54	8	232	305	0	0	255	156
87	44	54	8	232	306	0	0	255	156
88	42	54	9	233	307	0	0	255	157
89	41	54	8	234	308	0	0	255	157
90	40	54	9	235	308	0	0	255	157
91	39	54	9	236	309	0	0	255	158
92	39	54	9	238	309	0	0	255	158
93	38	54	9	239	310	0	0	255	158
94	36	55	9	239	311	0	0	255	158
95	35	55	9	241	312	0	0	255	158
96	35	55	9	242	313	0	0	255	159
97	34	55	9	243	313	0	0	255	159
98	33	55	8	244	313	0	0	255	159
99	33	55	8	245	314	0	0	255	159
100	32	55	8	246	315	0	0	255	159

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 2, SUMMARY PCLTF FINANCIAL STATISTICS
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	UNOBLIGATED BALANCE	BALANCE	NON-INTEREST EXPENDITURES	INTEREST PAYMENTS	TAX REVENUE	INTEREST REVENUE
1	0.0	0.0	0.0	0.0	37.56	1.12
2	38.69	38.69	0.0	0.0	36.62	4.70
3	80.01	80.01	0.0	0.0	32.61	9.25
4	121.87	121.87	0.0	0.0	28.45	12.21
5	162.53	162.53	0.0	0.0	25.31	14.33
6	202.17	202.17	0.0	0.0	6.15	15.40
7	223.71	223.71	0.0	0.0	0.0	14.71
8	238.42	238.42	0.0	0.0	0.0	13.59
9	252.01	252.01	0.0	0.0	0.0	14.06
10	266.07	266.07	0.04	0.0	0.0	14.53
11	280.55	280.56	0.0	0.0	0.0	14.98
12	295.53	295.54	0.0	0.0	0.0	15.43
13	310.95	310.97	20.24	-0.05	0.0	15.53
14	300.06	306.20	0.26	-0.47	0.44	16.09
15	315.54	321.99	1.31	-0.47	0.58	16.88
16	330.56	337.67	1.25	-0.46	0.57	17.67
17	353.32	354.20	48.48	-0.90	0.56	18.06
18	307.92	323.43	0.82	-2.29	0.96	18.79
19	324.13	340.06	0.83	-2.36	1.07	19.70
20	341.25	357.65	66.00	-3.11	1.05	20.13
21	289.18	309.71	158.37	-6.83	1.41	19.65
22	96.52	165.58	5.74	-11.50	2.27	19.88
23	97.20	170.48	18.98	-12.02	2.47	20.40
24	102.89	162.36	1.15	-12.88	2.79	21.19
25	164.08	172.30	0.55	-13.40	2.85	22.23
26	176.68	183.43	6.45	-14.02	2.79	23.30
27	186.55	189.06	40.42	-14.80	2.74	23.73
28	145.85	160.31	46.37	-16.29	3.02	23.64
29	95.41	124.31	92.10	-18.44	3.40	23.10
30	-15.50	40.27	35.85	-21.99	3.76	23.43
31	-45.47	9.62	0.73	-23.72	4.10	24.28
32	-28.16	13.55	113.05	-26.61	4.13	25.24
33	-142.99	-96.75	9.78	-30.93	4.04	25.88
34	-146.37	-107.53	2.23	-32.34	3.96	26.88
35	-152.07	-111.25	28.53	-33.93	3.88	27.79
36	-154.59	-142.04	3.34	-35.66	4.09	28.43
37	-159.25	-148.52	4.05	-37.41	4.10	29.83
38	-167.67	-156.04	3.27	-39.23	4.02	31.29
39	-166.59	-163.23	142.75	-42.59	3.67	31.63
40	-358.88	-313.27	31.72	-48.68	3.77	32.17
41	-413.39	-357.72	7.88	-51.09	4.04	32.78
42	-439.05	-379.88	6.32	-53.68	4.04	34.27
43	-416.36	-401.57	56.92	-57.22	3.96	35.74
44	-497.82	-476.00	249.05	-64.58	3.64	35.66
45	-845.80	-750.32	44.72	-74.25	3.73	35.21
46	-941.06	-830.36	37.33	-78.09	3.96	35.11
47	-1013.74	-906.71	285.04	-86.53	3.96	34.97
48	-1352.15	-1239.35	125.22	-101.36	4.10	35.86
49	-1565.98	-1425.96	17.58	-109.86	3.88	36.88
50	-1650.86	-1512.64	249.26	-117.88	3.78	36.09

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES
(CONTINUED)
TABLE 2- 2: SUMMARY PCLTF FINANCIAL STATISTICS
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	UNOBLIGATED BALANCE	BALANCE	NON-INTEREST EXPENDITURES	INTEREST PAYMENTS	TAX REVENUE	INTEREST REVENUE
51	-1962.03	-1839.91	79.89	-130.60	4.22	35.33
52	-2119.36	-2010.83	26.32	-138.67	4.59	35.70
53	-2250.37	-2135.52	887.11	-162.63	4.66	37.02
54	-3446.87	-3143.58	23.34	-199.13	4.66	38.45
55	-3618.20	-3322.93	120.74	-209.96	4.66	38.29
56	-3945.36	-3610.67	38.40	-222.81	4.88	38.03
57	-3886.30	-3828.97	259.38	-238.22	4.95	38.13
58	-4413.73	-4283.46	31.82	-258.10	5.17	39.14
59	-4633.03	-4529.07	468.60	-276.91	5.24	37.16
60	-5469.20	-5232.17	34.77	-304.64	5.46	37.24
61	-5697.51	-5528.87	54.94	-321.34	5.53	38.44
62	-6042.37	-5861.17	45.70	-339.24	5.53	39.56
63	-6243.56	-6201.01	594.22	-366.97	5.53	39.58
64	-7329.55	-7117.09	133.03	-404.30	5.53	38.92
65	-7852.52	-7609.96	69.20	-428.93	5.53	39.61
66	-8320.58	-8062.93	142.42	-452.71	5.53	38.91
67	-8722.16	-8613.61	92.46	-478.02	5.75	37.08
68	-9236.80	-9141.23	66.04	-504.87	5.82	37.53
69	-9764.59	-9668.77	66.04	-532.31	5.82	38.06
70	-10294.33	-10223.21	287.38	-565.25	5.82	38.53
71	-11160.98	-11031.45	73.49	-602.92	5.82	39.04
72	-11797.45	-11662.97	2089.30	-673.87	5.82	39.63
73	-15131.14	-14380.67	84.38	-775.12	6.04	40.22
74	-15901.96	-15193.86	336.39	-821.60	6.11	40.46
75	-17118.54	-16305.23	910.29	-889.29	6.11	40.61
76	-18467.56	-18058.05	99.11	-964.24	6.11	41.52
77	-19500.88	-19073.72	102.47	-1016.97	6.11	42.39
78	-20505.25	-20144.62	417.93	-1078.39	6.11	43.22
79	-21782.98	-21591.56	202.55	-1148.70	6.11	43.82
80	-23119.52	-22892.83	199.78	-1215.35	6.33	44.15
81	-24518.76	-24257.42	1721.04	-1314.36	6.41	44.78
82	-27892.44	-27241.58	134.08	-1437.34	6.41	45.61
83	-29409.41	-28760.92	151.51	-1516.02	6.41	46.47
84	-31027.75	-30375.50	142.92	-1599.08	6.41	47.35
85	-32198.68	-32063.68	151.67	-1686.27	6.62	48.27
86	-33987.31	-33846.65	259.03	-1780.13	6.70	49.18
87	-36002.98	-35829.84	171.21	-1880.56	6.70	50.12
88	-38007.93	-37824.70	2344.76	-2024.44	6.70	51.14
89	-42985.35	-42135.97	187.12	-2204.44	6.70	52.09
90	-45320.37	-44468.62	2665.70	-2371.26	6.70	53.04
91	-51080.98	-49445.73	218.55	-2579.69	6.70	53.95
92	-53150.82	-52183.18	1268.57	-2739.31	6.70	54.09
93	-57457.12	-56130.13	4140.54	-2983.06	6.91	42.19
94	-64930.60	-63204.50	248.92	-3266.72	7.21	38.72
95	-68469.94	-66673.87	245.51	-3444.33	7.28	39.45
96	-71826.56	-70316.75	266.14	-3631.20	7.28	40.14
97	-74406.00	-74166.25	267.00	-3828.26	7.28	40.85
98	-78458.44	-78213.25	313.08	-4036.24	7.50	41.58
99	-82779.50	-82513.25	564.22	-4261.07	7.57	42.36
100	-87645.50	-87288.44	314.43	-4500.87	7.57	43.36

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 3: SUMMARY OF PCLTF BALANCE
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	FUND BALANCE					UNOBLIGATED FUND BALANCE				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
1	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
2	38.69	38.69	(0.0)	38.69	38.69	38.69	38.69	(0.0)	38.69	38.69
3	80.01	80.01	(0.0)	80.01	80.01	80.01	80.01	(0.0)	80.01	80.01
4	121.87	121.87	(0.0)	121.87	121.87	121.87	121.87	(0.0)	121.87	121.87
5	162.53	162.53	(0.0)	162.53	162.53	162.53	162.53	(0.0)	162.53	162.53
6	202.17	202.17	(0.0)	202.17	202.17	202.17	202.17	(0.0)	202.17	202.17
7	223.71	223.71	(0.0)	223.71	223.71	223.71	223.71	(0.0)	223.71	223.71
8	238.42	238.42	(0.0)	238.42	238.42	238.42	238.42	(0.0)	238.42	238.42
9	252.01	252.01	(0.0)	252.01	252.01	252.01	252.01	(0.0)	252.01	252.01
10	266.07	266.07	(0.0)	266.07	266.07	266.07	266.07	(0.0)	266.07	266.07
11	280.60	280.56	(0.0)	280.60	280.60	280.60	280.55	(0.1)	280.60	280.60
12	295.58	295.54	(0.0)	295.58	295.58	295.58	295.53	(0.1)	295.58	295.58
13	311.01	310.97	(0.0)	311.01	311.01	311.01	310.95	(0.1)	311.01	311.01
14	326.87	306.20	(20.6)	326.87	326.87	326.87	300.06	(26.8)	326.87	326.87
15	341.42	321.99	(21.2)	343.54	343.54	340.79	315.54	(27.6)	343.54	343.54
16	349.86	337.67	(21.7)	361.06	361.06	346.53	330.56	(28.3)	361.06	361.06
17	358.52	354.20	(22.2)	379.48	379.48	352.35	353.32	(22.2)	379.48	379.48
18	376.80	323.43	(54.0)	398.83	398.83	370.39	307.92	(67.8)	398.83	398.83
19	374.51	340.06	(56.2)	419.17	419.17	361.30	324.13	(70.4)	419.17	419.17
20	370.63	357.65	(58.4)	440.54	440.54	350.05	341.25	(72.9)	440.54	440.54
21	-256.51	309.71	(88.7)	463.01	463.01	-256.98	289.18	(104.0)	463.01	463.01
22	-1217.75	165.58	(140.3)	485.95	486.63	-1435.33	96.52	(175.8)	485.76	486.63
23	-1264.93	170.48	(146.4)	509.34	511.44	-1492.65	97.20	(183.3)	509.34	511.44
24	-1314.82	162.36	(153.5)	535.31	537.53	-1549.14	102.89	(183.1)	535.31	537.53
25	-1367.54	172.30	(160.3)	562.61	564.94	-1367.54	164.08	(161.2)	562.61	564.94
26	-1423.24	183.43	(167.8)	591.31	593.75	-1423.24	176.68	(168.5)	591.31	593.75
27	-1482.07	189.06	(175.9)	620.36	624.03	-1482.07	186.55	(176.1)	619.65	624.03
28	-1544.16	160.31	(185.0)	651.69	655.86	-1544.16	145.85	(187.2)	650.72	655.86
29	-1609.70	124.31	(192.8)	674.13	689.30	-1609.70	95.41	(196.1)	674.13	689.30
30	-2000.20	40.27	(213.5)	700.06	724.46	-2229.09	-15.50	(227.0)	700.06	724.46
31	-2092.80	9.62	(223.6)	719.44	761.41	-2330.08	-45.47	(236.6)	719.44	761.41
32	-2187.09	13.55	(234.0)	756.10	800.24	-2436.52	-28.16	(246.7)	756.09	800.24
33	-2548.79	-96.75	(284.8)	792.76	840.92	-2548.87	-142.99	(302.8)	782.56	840.88
34	-2667.24	-107.53	(297.5)	807.87	883.59	-2667.45	-146.37	(315.3)	785.37	883.49
35	-2831.93	-111.25	(312.2)	848.42	927.85	-2844.13	-152.07	(330.8)	824.85	927.50
36	-2967.25	-142.04	(327.9)	793.51	974.15	-2980.58	-154.59	(328.2)	793.20	973.52
37	-3110.08	-148.52	(344.7)	832.68	1020.64	-3124.61	-159.25	(345.6)	832.01	1019.23
38	-3273.37	-156.04	(361.7)	873.25	1070.39	-3279.65	-167.67	(362.5)	872.10	1068.62
39	-3436.29	-163.23	(379.3)	915.61	1122.27	-3444.04	-166.59	(379.6)	913.95	1120.06
40	-3607.38	-313.27	(408.5)	959.71	1173.95	-4318.11	-358.88	(420.5)	957.66	1170.18
41	-3788.00	-357.72	(426.0)	730.05	1228.01	-4519.82	-413.39	(437.9)	727.58	1223.00
42	-3978.69	-379.88	(447.0)	763.73	1284.24	-4729.14	-439.05	(459.3)	760.90	1278.14
43	-4178.25	-401.57	(469.0)	798.69	1342.49	-4184.84	-416.36	(468.5)	795.42	1336.48
44	-5193.94	-476.00	(505.2)	835.06	1403.09	-5603.54	-497.82	(509.8)	831.39	1396.46
45	-5454.12	-750.32	(581.2)	550.18	1467.74	-5878.20	-845.80	(606.8)	498.87	1460.93
46	-5728.36	-830.36	(606.4)	523.80	1535.19	-6169.67	-941.06	(632.2)	466.86	1528.33
47	-6017.31	-906.71	(633.2)	543.94	1605.34	-6022.36	-1013.74	(654.8)	482.29	1598.41
48	-7453.28	-1239.35	(698.3)	506.13	1678.44	-8652.96	-1352.15	(726.4)	498.46	1673.50
49	-7839.33	-1425.96	(735.2)	522.13	1749.14	-9094.07	-1565.98	(767.8)	513.82	1741.92
50	-8243.65	-1512.64	(771.7)	538.68	1829.65	-9558.24	-1650.86	(806.8)	529.76	1821.99

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES
(CONTINUED)
TABLE 2- 3; SUMMARY OF PCLTF BALANCE
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	FUND BALANCE					UNOBLIGATED FUND BALANCE				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
51	-9053.36	-1839.91	(808.2)	-699.20	1876.96	-9179.80	-1962.03	(815.6)	-709.75	1864.53
52	-9521.70	-2010.83	(844.4)	-739.16	1946.91	-9653.55	-2119.36	(847.9)	-1086.42	1930.51
53	-10011.44	-2135.52	(888.0)	-783.52	2030.80	-10147.95	-2250.37	(892.1)	-1145.70	2013.63
54	-11673.70	-3143.58	(1350.0)	-845.80	2117.92	-11687.45	-3446.87	(1552.0)	-1208.19	2099.97
55	-12274.90	-3322.93	(1420.0)	-898.71	2208.49	-12287.38	-3618.20	(1630.9)	-918.66	2193.27
56	-12908.39	-3610.67	(1487.4)	-956.11	2302.23	-12921.96	-3945.36	(1706.2)	-1437.31	2285.92
57	-13575.16	-3828.97	(1562.2)	-1019.34	2332.49	-13589.87	-3886.30	(1562.3)	-1540.59	2314.11
58	-14280.65	-4283.46	(1634.9)	-1621.00	2426.41	-14297.59	-4413.73	(1638.6)	-1666.92	2406.87
59	-15023.50	-4529.07	(1718.7)	-1726.28	2526.73	-15042.61	-4633.03	(1723.3)	-1743.74	2505.78
60	-15805.55	-5232.17	(1796.2)	-1856.29	2630.34	-15827.00	-5469.20	(1818.0)	-1897.05	2607.77
61	-16631.30	-5528.87	(1888.2)	-1980.32	2737.81	-16654.75	-5697.51	(1907.1)	-2017.26	2714.54
62	-17500.85	-5861.17	(1984.1)	-2112.84	2849.53	-17526.39	-6042.37	(2003.4)	-2149.95	2824.86
63	-18418.21	-6201.01	(2084.8)	-2254.69	2966.67	-18446.53	-6243.56	(2085.1)	-2292.02	2941.08
64	-19381.60	-7117.09	(2202.8)	-3732.92	2668.98	-20472.90	-7329.55	(2224.5)	-3955.13	2640.90
65	-20395.75	-7609.96	(2338.0)	-3951.04	2774.91	-23665.55	-7852.52	(2371.7)	-3983.35	2745.08
66	-21461.95	-8062.93	(2459.9)	-4182.09	2882.22	-24929.35	-8320.58	(2496.0)	-4215.91	2853.46
67	-22584.05	-8613.61	(2575.4)	-4427.04	2994.77	-22616.56	-8722.16	(2581.6)	-4462.51	2964.24
68	-23764.22	-9141.23	(2708.1)	-4686.81	3113.64	-23797.56	-9236.80	(2707.0)	-4724.22	3081.91
69	-25006.37	-9668.77	(2846.8)	-4961.54	3237.10	-25041.00	-9764.59	(2844.9)	-5000.87	3205.04
70	-26313.96	-10223.21	(2992.4)	-5252.41	3364.28	-26350.03	-10294.33	(2993.6)	-5293.64	3331.18
71	-27690.04	-11031.45	(3139.6)	-5876.98	3435.17	-27727.87	-11160.98	(3141.7)	-5924.61	3382.13
72	-29138.31	-11662.97	(3300.0)	-6221.31	3526.46	-29177.96	-11797.45	(3302.0)	-6268.67	3458.17
73	-47932.58	-14380.67	(4121.0)	-6583.62	3618.58	-48055.05	-15131.14	(4479.2)	-6632.44	3534.15
74	-50516.59	-15193.86	(4330.8)	-6982.89	3711.07	-50645.66	-15901.96	(4703.5)	-7038.05	3629.56
75	-53237.11	-16305.23	(4686.5)	-7608.34	3803.14	-53372.63	-17118.54	(5100.4)	-7730.56	3717.53
76	-56103.08	-18058.05	(4979.7)	-8057.71	3922.24	-56245.41	-18467.56	(5064.3)	-8187.68	3840.30
77	-59153.36	-19073.72	(5233.7)	-8533.34	4044.13	-59310.62	-19500.88	(5321.8)	-8666.19	3966.47
78	-62363.79	-20144.62	(5501.8)	-9036.77	4169.10	-62536.37	-20505.25	(5548.4)	-9104.82	4096.68
79	-65744.25	-21591.56	(5763.4)	-12010.12	4296.98	-65932.44	-21782.98	(5760.9)	-12082.84	4221.50
80	-69307.62	-22892.83	(6070.1)	-12699.30	4427.66	-69502.31	-23119.52	(6071.5)	-12775.21	4348.99
81	-73061.56	-24257.42	(6392.7)	-13446.68	4561.46	-73264.25	-24518.76	(6397.6)	-13531.56	4479.48
82	-76997.06	-27241.58	(6913.0)	-14246.99	4698.10	-86856.19	-27892.44	(7049.8)	-14344.56	4612.65
83	-81142.00	-28760.92	(7266.0)	-15082.25	4837.41	-91247.56	-29409.41	(7404.3)	-15190.07	4748.30
84	-85508.44	-30375.50	(7636.6)	-16256.45	4979.58	-95892.31	-31027.75	(7776.3)	-16455.35	4886.61
85	-90107.31	-32063.68	(8026.4)	-17212.57	5124.87	-90327.19	-32198.68	(8027.0)	-17418.58	5027.97
86	-94952.12	-33846.65	(8435.9)	-18214.42	5264.64	-95181.69	-33987.31	(8436.4)	-18428.89	5161.25
87	-100054.62	-35829.84	(8853.0)	-19268.70	5408.41	-100294.12	-36002.98	(8849.7)	-19393.21	5298.75
88	-105428.37	-37824.70	(9305.2)	-20383.05	5554.05	-105678.06	-38007.93	(9301.9)	-20508.87	5437.64
89	-111087.50	-42135.97	(9675.0)	-31154.74	5638.37	-111347.25	-42985.35	(9687.1)	-31257.13	5498.83
90	-117046.62	-44468.62	(10169.6)	-32855.15	5737.21	-117316.75	-45320.37	(10187.0)	-32962.00	5577.70
91	-160992.25	-49445.73	(11313.2)	-34655.44	5835.32	-182851.62	-51080.98	(11607.4)	-34769.23	5655.13
92	-169386.19	-52183.18	(11890.1)	-36549.62	5930.64	-192127.12	-53150.82	(12186.9)	-36669.77	5749.64
93	-178212.81	-56130.13	(12517.0)	-38546.08	6021.20	-201870.62	-57457.12	(12836.8)	-38672.78	5833.07
94	-187495.50	-63204.50	(13021.3)	-43271.68	5994.34	-187678.69	-64930.60	(13229.5)	-43376.68	5782.38
95	-197260.69	-66673.87	(13690.1)	-45592.31	6058.93	-197449.87	-68469.94	(13907.5)	-45701.52	5815.74
96	-207518.00	-70316.75	(14388.9)	-48036.19	6100.60	-207710.12	-71826.56	(14597.0)	-48149.77	5839.07
97	-218307.50	-74166.25	(15123.4)	-50610.46	6133.70	-218503.44	-74406.00	(15125.5)	-50728.78	5886.11
98	-229656.87	-78213.25	(15897.7)	-53321.32	6157.37	-229856.50	-78458.44	(15899.3)	-53444.57	5899.41
99	-241594.12	-82513.25	(16706.5)	-56177.27	6209.09	-241802.25	-82779.50	(16707.4)	-56306.04	5952.23
100	-254150.56	-87288.44	(17604.7)	-59184.68	6252.98	-254367.81	-87645.50	(17619.4)	-59319.00	5997.73

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 4: SUMMARY OF PCLTF TAX REVENUES, AND TOTAL MONITORING, CARE, RESPONSE, AND CLAIMS EXPENDITURES
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	TAX REVENUES					MONITORING, CARE, RESPONSE, AND CLAIMS PCLTF EXPENDITURES				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
1	37.56	37.56	(0.0)	37.56	37.56	0.0	0.0	(0.0)	0.0	0.0
2	36.62	36.62	(0.0)	36.62	36.62	0.0	0.0	(0.0)	0.0	0.0
3	32.61	32.61	(0.0)	32.61	32.61	0.0	0.0	(0.0)	0.0	0.0
4	28.45	28.45	(0.0)	28.45	28.45	0.0	0.0	(0.0)	0.0	0.0
5	25.31	25.31	(0.0)	25.31	25.31	0.0	0.0	(0.0)	0.0	0.0
6	6.15	6.15	(0.0)	6.15	6.15	0.0	0.0	(0.0)	0.0	0.0
7	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
8	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
9	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
10	0.0	0.0	(0.0)	0.0	0.0	0.0	0.04	(0.0)	0.0	0.0
11	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
12	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
13	0.0	0.0	(0.0)	0.0	0.0	0.0	20.24	(20.2)	0.0	0.0
14	0.0	0.44	(0.4)	0.0	0.0	0.0	0.26	(0.2)	0.0	0.0
15	0.0	0.58	(0.6)	0.0	0.0	0.0	1.31	(0.8)	0.0	6.89
16	0.0	0.57	(0.6)	0.0	0.0	0.0	1.25	(0.9)	0.0	2.28
17	0.0	0.56	(0.6)	0.0	0.0	0.0	48.48	(47.7)	0.0	0.0
18	0.0	0.96	(0.7)	0.0	0.0	0.0	0.82	(0.8)	0.0	0.39
19	0.0	1.07	(0.7)	0.0	0.0	0.0	0.83	(0.8)	0.0	0.06
20	0.0	1.05	(0.7)	0.0	0.0	0.0	66.00	(65.6)	0.0	0.63
21	0.0	1.41	(0.8)	0.0	11.15	0.0	158.37	(111.6)	0.0	182.02
22	0.0	2.27	(0.9)	0.0	14.64	0.0	5.74	(4.4)	0.0	6.71
23	0.0	2.47	(1.0)	0.0	14.35	0.0	18.98	(18.9)	0.0	0.0
24	0.0	2.79	(1.0)	0.0	14.06	0.0	1.15	(1.0)	0.0	0.10
25	0.0	2.85	(1.1)	0.0	13.78	0.0	0.55	(0.5)	0.0	0.0
26	0.0	2.79	(1.0)	0.0	13.51	0.0	6.45	(3.7)	0.0	39.89
27	0.0	2.74	(1.0)	0.0	13.24	0.0	40.42	(40.0)	0.0	3.89
28	0.0	3.02	(1.0)	0.0	12.97	0.0	46.37	(37.5)	0.0	7.70
29	0.0	3.40	(1.0)	0.0	12.71	0.0	92.10	(92.1)	0.0	0.0
30	0.0	3.76	(1.1)	0.0	12.46	0.0	35.85	(32.1)	0.0	38.15
31	0.0	4.10	(1.1)	0.0	12.21	0.0	0.73	(0.5)	0.0	3.26
32	0.0	4.13	(1.1)	0.0	11.96	0.0	113.05	(99.1)	0.14	3.00
33	0.0	4.04	(1.1)	0.0	11.72	0.15	9.78	(6.2)	0.32	21.48
34	0.0	3.96	(1.0)	0.0	11.49	0.28	2.23	(1.4)	0.71	1.37
35	0.0	3.88	(1.0)	0.0	11.26	0.59	28.53	(21.7)	1.17	43.09
36	0.0	4.09	(1.0)	0.0	11.04	0.77	3.34	(1.5)	1.69	4.51
37	0.0	4.10	(1.0)	0.0	10.81	1.11	4.05	(1.7)	1.99	4.38
38	0.0	4.02	(1.0)	0.0	10.60	1.58	3.27	(0.7)	2.41	6.66
39	0.0	3.67	(0.9)	0.0	10.39	2.23	142.75	(135.5)	3.05	55.58
40	0.0	3.77	(0.9)	0.0	10.18	2.43	31.72	(27.5)	3.69	8.66
41	0.0	4.04	(0.9)	0.0	9.97	2.97	7.88	(1.8)	4.39	19.85
42	0.0	4.04	(0.9)	0.0	9.78	3.81	6.32	(0.8)	4.87	10.55
43	0.0	3.96	(0.9)	0.0	9.58	3.65	56.92	(45.9)	5.82	17.99
44	0.0	3.64	(0.9)	0.0	9.39	4.57	249.05	(148.9)	7.45	901.78
45	0.0	3.73	(0.8)	0.0	9.20	4.88	44.72	(33.4)	7.36	53.69
46	0.0	3.96	(0.8)	0.0	9.02	5.46	37.33	(17.5)	9.09	61.48
47	0.0	3.96	(0.8)	0.0	8.84	5.99	285.04	(271.1)	9.98	41.07
48	0.0	4.10	(0.8)	0.0	8.66	6.53	125.22	(100.1)	12.26	93.45
49	0.0	3.88	(0.8)	0.0	8.49	7.10	17.58	(2.7)	11.79	45.06
50	0.0	3.78	(0.8)	0.0	8.44	8.35	249.26	(140.1)	14.09	390.52

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES
(CONTINUED)
TABLE 2- 4; SUMMARY OF PCLTF TAX REVENUES, AND TOTAL MONITORING, CARE, RESPONSE, AND CLAIMS EXPENDITURES
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	TAX REVENUES					MONITORING, CARE, RESPONSE, AND CLAIMS PCLTF EXPENDITURES				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
51	0.0	4.22	(0.8)	6.33	8.44	9.00	79.89	(58.1)	15.88	63.34
52	0.0	4.59	(0.8)	8.44	8.44	10.45	26.32	(5.3)	16.93	48.57
53	0.0	4.66	(0.8)	8.44	8.44	11.60	887.11	(866.0)	16.59	50.75
54	0.0	4.66	(0.8)	8.44	8.44	12.50	23.34	(3.2)	17.25	50.85
55	0.0	4.66	(0.8)	8.44	8.44	13.67	120.74	(90.4)	18.69	62.63
56	0.0	4.88	(0.8)	8.44	8.44	14.62	38.40	(11.2)	19.76	64.59
57	0.0	4.95	(0.8)	8.44	8.44	15.91	259.38	(228.2)	23.25	66.45
58	0.0	5.17	(0.8)	8.44	8.44	17.34	31.82	(3.4)	23.30	63.37
59	0.0	5.24	(0.8)	8.44	8.44	18.37	468.60	(431.2)	27.39	88.84
60	0.0	5.46	(0.8)	8.44	8.44	19.50	34.77	(3.5)	27.79	69.79
61	0.0	5.53	(0.8)	8.44	8.44	20.89	54.94	(20.2)	29.42	73.09
62	0.0	5.53	(0.8)	8.44	8.44	22.24	45.70	(9.1)	32.79	76.12
63	0.0	5.53	(0.8)	8.44	8.44	23.27	594.22	(447.9)	34.30	1451.69
64	0.0	5.53	(0.8)	8.44	8.44	25.03	133.03	(59.3)	41.86	181.50
65	0.0	5.53	(0.8)	8.44	8.44	26.14	69.20	(11.9)	40.23	188.54
66	0.0	5.53	(0.8)	8.44	8.44	28.63	142.42	(55.7)	49.25	196.83
67	0.0	5.75	(0.7)	8.44	8.44	31.50	92.46	(26.1)	53.88	166.86
68	0.0	5.82	(0.7)	8.44	8.44	33.14	66.04	(7.8)	47.43	120.63
69	0.0	5.82	(0.7)	8.44	8.44	34.57	66.04	(7.6)	49.70	120.63
70	0.0	5.82	(0.7)	8.44	8.44	37.27	287.38	(214.7)	62.17	124.82
71	0.0	5.82	(0.7)	8.44	8.44	40.80	73.49	(8.0)	53.60	129.55
72	0.0	5.82	(0.7)	8.44	8.44	43.39	2089.30	(2006.2)	63.89	216.98
73	0.0	6.04	(0.7)	8.44	8.44	44.76	84.38	(8.6)	64.90	145.33
74	0.0	6.11	(0.7)	8.44	8.44	47.93	336.39	(226.7)	72.19	272.78
75	0.0	6.11	(0.7)	8.44	8.44	52.04	910.29	(816.2)	73.47	202.48
76	0.0	6.11	(0.7)	8.44	8.44	54.12	99.11	(9.8)	79.09	193.98
77	0.0	6.11	(0.7)	8.44	8.44	56.65	102.47	(10.1)	82.57	198.48
78	0.0	6.11	(0.7)	8.44	8.44	58.89	417.93	(267.5)	86.62	273.20
79	0.0	6.11	(0.7)	8.44	8.44	63.56	202.55	(72.4)	89.31	462.19
80	0.0	6.33	(0.7)	8.44	8.44	66.51	199.78	(78.0)	94.09	267.79
81	0.0	6.41	(0.7)	8.44	8.44	69.17	1721.04	(1590.7)	98.37	278.92
82	0.0	6.41	(0.7)	8.44	8.44	72.09	134.08	(13.6)	102.32	250.15
83	0.0	6.41	(0.7)	8.44	8.44	75.49	151.51	(17.3)	102.57	302.98
84	0.0	6.41	(0.7)	8.44	8.44	78.83	142.92	(13.9)	106.63	242.40
85	0.0	6.62	(0.6)	8.44	8.44	82.37	151.67	(14.3)	125.77	253.71
86	0.0	6.70	(0.6)	8.44	8.44	86.20	259.03	(77.0)	126.62	384.40
87	0.0	6.70	(0.6)	8.44	8.44	90.82	171.21	(17.2)	133.34	327.55
88	0.0	6.70	(0.6)	8.44	8.44	98.55	2344.76	(1496.1)	154.45	1037.61
89	0.0	6.70	(0.6)	8.44	8.44	103.12	187.12	(18.4)	144.23	318.60
90	0.0	6.70	(0.6)	8.44	8.44	107.47	2665.70	(2469.9)	150.38	446.81
91	0.0	6.70	(0.6)	8.44	8.44	113.07	218.55	(23.2)	162.79	475.18
92	0.0	6.70	(0.6)	8.44	8.44	121.07	1268.57	(756.0)	187.18	1281.89
93	0.0	6.91	(0.6)	8.44	8.44	120.97	4140.54	(3897.2)	199.04	514.51
94	0.0	7.21	(0.5)	8.44	8.44	125.81	248.92	(29.2)	201.19	400.98
95	0.0	7.28	(0.6)	8.44	8.44	133.93	245.51	(21.5)	202.29	397.98
96	0.0	7.28	(0.6)	8.44	8.44	142.80	266.14	(23.6)	216.08	434.11
97	0.0	7.28	(0.6)	8.44	8.44	146.29	267.00	(24.5)	214.08	452.31
98	0.0	7.50	(0.5)	8.44	8.44	152.58	313.08	(45.6)	224.09	508.46
99	0.0	7.57	(0.5)	8.44	8.44	158.73	564.22	(184.0)	257.20	881.47
100	0.0	7.57	(0.5)	8.44	8.44	173.97	314.43	(33.8)	239.76	515.77

TABLE 2- 5: SUMMARY OF PCLTF INTEREST REVENUES AND PAYMENTS
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	INTEREST REVENUES					INTEREST PAYMENTS				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
1	1.12	1.12	(0.0)	1.12	1.12	0.0	0.0	(0.0)	0.0	0.0
2	4.70	4.70	(0.0)	4.70	4.70	0.0	0.0	(0.0)	0.0	0.0
3	9.25	9.25	(0.0)	9.25	9.25	0.0	0.0	(0.0)	0.0	0.0
4	12.21	12.21	(0.0)	12.21	12.21	0.0	0.0	(0.0)	0.0	0.0
5	14.33	14.33	(0.0)	14.33	14.33	0.0	0.0	(0.0)	0.0	0.0
6	15.40	15.40	(0.0)	15.40	15.40	0.0	0.0	(0.0)	0.0	0.0
7	14.71	14.71	(0.0)	14.71	14.71	0.0	0.0	(0.0)	0.0	0.0
8	13.59	13.59	(0.0)	13.59	13.59	0.0	0.0	(0.0)	0.0	0.0
9	14.06	14.06	(0.0)	14.06	14.06	0.0	0.0	(0.0)	0.0	0.0
10	14.53	14.53	(0.0)	14.53	14.53	0.0	0.0	(0.0)	0.0	0.0
11	14.98	14.98	(0.0)	14.98	14.98	0.0	0.0	(0.0)	0.0	0.0
12	15.43	15.43	(0.0)	15.43	15.43	0.0	0.0	(0.0)	0.0	0.0
13	15.86	15.53	(0.3)	15.86	15.86	0.0	-0.05	(0.1)	0.0	0.0
14	16.60	16.09	(0.6)	16.67	16.67	0.0	-0.47	(0.5)	0.0	0.0
15	17.23	16.88	(0.6)	17.52	17.52	0.0	-0.47	(0.5)	0.0	0.0
16	17.40	17.67	(0.6)	18.41	18.41	0.0	-0.46	(0.5)	0.0	0.0
17	18.28	18.06	(0.8)	19.35	19.35	0.0	-0.90	(0.6)	0.0	0.0
18	18.84	18.79	(1.0)	20.34	20.34	0.0	-2.29	(1.9)	0.0	0.0
19	18.67	19.70	(1.0)	21.38	21.38	0.0	-2.36	(1.9)	0.0	0.0
20	5.20	20.13	(1.2)	22.47	22.47	-12.91	-3.11	(2.1)	0.0	0.0
21	0.0	19.65	(1.5)	23.58	23.61	-38.08	-6.83	(3.5)	0.0	0.0
22	0.0	19.88	(1.8)	24.72	24.82	-61.83	-11.50	(5.6)	0.0	0.0
23	0.0	20.40	(1.9)	25.98	26.08	-64.24	-12.02	(5.9)	0.0	0.0
24	0.0	21.19	(2.1)	27.30	27.41	-66.79	-12.88	(6.1)	0.0	0.0
25	0.0	22.23	(2.2)	28.69	28.81	-69.48	-13.40	(6.4)	0.0	0.0
26	0.0	23.30	(2.3)	30.14	30.28	-72.33	-14.02	(6.7)	0.0	0.0
27	0.0	23.73	(2.4)	31.62	31.83	-75.33	-14.80	(7.0)	0.0	0.0
28	0.0	23.64	(2.6)	32.71	33.45	-78.51	-16.29	(7.3)	0.0	0.0
29	0.0	23.10	(2.9)	33.97	35.15	-81.85	-18.44	(7.6)	0.0	0.0
30	0.0	23.43	(3.2)	35.70	36.95	-101.89	-21.99	(8.4)	0.0	0.0
31	0.0	24.28	(3.4)	36.69	38.83	-106.50	-23.72	(8.8)	0.0	0.0
32	0.0	25.24	(3.5)	38.47	40.81	-124.04	-26.61	(9.8)	0.0	0.0
33	0.0	25.88	(3.7)	39.91	42.88	-129.77	-30.93	(11.8)	0.0	0.0
34	0.0	26.88	(3.8)	41.19	45.05	-136.56	-32.34	(12.4)	0.0	0.0
35	0.0	27.79	(3.9)	38.52	47.30	-144.26	-33.93	(13.0)	0.0	0.0
36	0.0	28.43	(4.1)	40.44	49.61	-151.17	-35.66	(13.8)	0.0	0.0
37	0.0	29.83	(4.4)	42.43	52.01	-158.70	-37.41	(14.5)	0.0	0.0
38	0.0	31.29	(4.6)	44.50	54.54	-166.87	-39.23	(15.2)	0.0	0.0
39	0.0	31.63	(4.8)	46.65	57.17	-175.17	-42.59	(15.9)	0.0	0.0
40	0.0	32.17	(5.0)	43.22	59.76	-183.91	-48.68	(17.1)	0.0	0.0
41	0.0	32.78	(5.3)	37.17	62.51	-193.14	-51.09	(18.0)	0.0	0.0
42	0.0	34.27	(5.5)	38.88	65.36	-202.85	-53.68	(18.9)	0.0	0.0
43	0.0	35.74	(5.8)	40.65	68.32	-213.04	-57.22	(20.1)	0.0	0.0
44	0.0	35.66	(6.0)	42.50	71.43	-264.80	-64.58	(22.4)	0.0	0.0
45	0.0	35.21	(6.2)	27.97	74.72	-278.09	-74.25	(25.5)	0.0	0.0
46	0.0	35.11	(6.3)	26.59	78.14	-292.09	-78.09	(26.8)	0.0	0.0
47	0.0	34.97	(6.5)	24.83	81.63	-306.84	-86.53	(28.0)	0.0	0.0
48	0.0	35.86	(6.8)	25.63	85.12	-380.27	-101.36	(31.0)	0.0	0.0
49	0.0	36.88	(7.0)	26.44	89.04	-399.89	-109.86	(32.7)	0.0	0.0
50	0.0	36.09	(7.3)	17.84	91.51	-427.66	-117.88	(34.3)	-20.42	0.0

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES
(CONTINUED)
TABLE 2- 5: SUMMARY OF PCLTF INTEREST REVENUES AND PAYMENTS
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	INTEREST REVENUES					INTEREST PAYMENTS				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
51	0.0	35.33	(7.6)	0.0	95.25	-461.84	-130.60	(36.1)	-35.74	0.0
52	0.0	35.70	(8.0)	0.0	99.01	-485.68	-138.67	(37.9)	-37.82	0.0
53	0.0	37.02	(8.3)	0.0	103.27	-566.33	-162.63	(44.5)	-40.37	0.0
54	0.0	38.45	(8.6)	0.0	107.69	-595.47	-199.13	(64.2)	-43.32	0.0
55	0.0	38.29	(8.8)	0.0	112.28	-626.16	-209.96	(67.6)	-46.05	0.0
56	0.0	38.03	(9.2)	0.0	115.79	-658.48	-222.81	(71.1)	-49.03	0.0
57	0.0	38.13	(9.5)	0.0	118.47	-692.58	-238.22	(74.6)	-77.42	0.0
58	0.0	39.14	(9.9)	0.0	123.31	-728.58	-258.10	(78.3)	-83.25	0.0
59	0.0	37.16	(9.8)	0.0	128.39	-766.49	-276.91	(82.0)	-89.08	0.0
60	0.0	37.24	(10.2)	0.0	133.65	-806.45	-304.64	(86.5)	-95.22	0.0
61	0.0	38.44	(10.6)	0.0	139.11	-848.59	-321.34	(91.0)	-101.58	0.0
62	0.0	39.56	(10.9)	0.0	144.80	-893.00	-339.24	(95.7)	-108.39	0.0
63	0.0	39.58	(10.9)	0.0	135.51	-939.77	-366.97	(100.4)	-140.90	0.0
64	0.0	38.92	(10.9)	0.0	135.56	-988.94	-404.30	(107.1)	-190.89	0.0
65	0.0	39.61	(11.1)	0.0	140.88	-1040.67	-428.93	(113.5)	-202.05	0.0
66	0.0	38.91	(11.2)	0.0	146.35	-1095.07	-452.71	(119.6)	-213.87	0.0
67	0.0	37.08	(11.4)	0.0	152.10	-1152.31	-478.02	(125.9)	-226.41	0.0
68	0.0	37.53	(11.8)	0.0	158.14	-1212.53	-504.87	(132.6)	-239.69	0.0
69	0.0	38.06	(12.2)	0.0	164.39	-1275.92	-532.31	(139.6)	-253.74	0.0
70	0.0	38.53	(12.6)	0.0	169.71	-1342.64	-565.25	(146.7)	-283.91	0.0
71	0.0	39.04	(13.0)	0.0	173.64	-1412.86	-602.92	(154.2)	-300.55	0.0
72	0.0	39.63	(13.4)	0.0	178.22	-1955.18	-673.87	(168.5)	-318.12	0.0
73	0.0	40.22	(13.9)	0.0	182.84	-2447.15	-775.12	(204.3)	-336.94	0.0
74	0.0	40.46	(14.3)	0.0	187.46	-2579.02	-821.60	(217.5)	-361.13	0.0
75	0.0	40.61	(14.8)	0.0	192.57	-2717.89	-889.29	(233.3)	-389.16	0.0
76	0.0	41.52	(15.3)	0.0	198.58	-2864.77	-964.24	(247.8)	-412.14	0.0
77	0.0	42.39	(15.8)	0.0	204.74	-3020.42	-1016.97	(260.6)	-436.47	0.0
78	0.0	43.22	(16.3)	0.0	211.05	-3184.27	-1078.39	(273.7)	-462.20	0.0
79	0.0	43.82	(16.8)	0.0	217.50	-3356.87	-1148.70	(287.5)	-613.94	0.0
80	0.0	44.15	(17.3)	0.0	224.10	-3538.76	-1215.35	(303.1)	-649.52	0.0
81	0.0	44.78	(17.8)	0.0	230.85	-3730.03	-1314.36	(320.5)	-687.91	0.0
82	0.0	45.61	(18.4)	0.0	237.74	-3930.90	-1437.34	(345.4)	-728.61	0.0
83	0.0	46.47	(18.9)	0.0	244.77	-4142.48	-1516.02	(363.2)	-776.72	0.0
84	0.0	47.35	(19.6)	0.0	251.94	-4365.35	-1599.08	(382.0)	-831.44	0.0
85	0.0	48.27	(20.2)	0.0	259.11	-4600.10	-1686.27	(401.7)	-880.14	0.0
86	0.0	49.18	(20.9)	0.0	266.18	-4847.38	-1780.13	(422.1)	-931.26	0.0
87	0.0	50.12	(21.6)	0.0	273.41	-5107.82	-1880.56	(443.5)	-985.15	0.0
88	0.0	51.14	(22.3)	0.0	279.56	-5382.09	-2024.44	(462.8)	-1228.07	0.0
89	0.0	52.09	(23.0)	0.0	284.05	-5670.91	-2204.44	(484.5)	-1590.96	0.0
90	0.0	53.04	(23.7)	0.0	288.98	-5975.06	-2371.26	(518.0)	-1677.93	0.0
91	0.0	53.95	(24.5)	0.0	293.84	-8214.00	-2579.69	(567.8)	-1769.78	0.0
92	0.0	54.09	(24.8)	0.0	298.53	-8642.18	-2739.31	(597.2)	-1866.49	0.0
93	0.0	42.19	(20.9)	0.0	295.01	-9092.44	-2983.06	(621.8)	-1968.41	0.0
94	0.0	38.72	(21.4)	0.0	301.67	-9566.04	-3266.72	(657.0)	-2208.97	0.0
95	0.0	39.45	(22.0)	0.0	304.04	-10063.95	-3444.33	(690.9)	-2327.41	0.0
96	0.0	40.14	(22.6)	0.0	305.97	-10587.24	-3631.20	(726.4)	-2452.16	0.0
97	0.0	40.85	(23.2)	0.0	307.45	-11137.68	-3828.26	(763.7)	-2583.54	0.0
98	0.0	41.58	(23.9)	0.0	309.15	-11716.66	-4036.24	(803.0)	-2721.92	0.0
99	0.0	42.36	(24.6)	0.0	311.60	-12325.66	-4261.07	(844.9)	-2867.68	0.0
100	0.0	43.36	(25.3)	0.0	313.63	-12966.22	-4500.87	(889.7)	-3021.17	0.0

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 6: SUMMARY OF ANNUAL PCLTF EXPENDITURES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	MONITORING		RESPONSE		POST-CLOSURE CARE		CLAIMS		INTEREST PAYMENTS	
YEAR	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)
1	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
2	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
3	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
4	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
5	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
6	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
7	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
8	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
9	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
10	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.02	(0.02)	0.0	(0.0)
11	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
12	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
13	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	10.41	(10.41)	-0.03	(0.03)
14	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.13	(0.10)	-0.26	(0.26)
15	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.62	(0.37)	-0.24	(0.24)
16	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.57	(0.40)	-0.23	(0.23)
17	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	21.30	(20.98)	-0.44	(0.30)
18	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.35	(0.32)	-1.07	(0.87)
19	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.34	(0.32)	-1.05	(0.87)
20	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	25.78	(25.63)	-1.34	(0.90)
21	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	59.49	(41.93)	-2.82	(1.43)
22	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	2.07	(1.58)	-4.57	(2.23)
23	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	6.59	(6.57)	-4.59	(2.24)
24	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.39	(0.32)	-4.73	(2.24)
25	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.18	(0.17)	-4.73	(2.25)
26	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	1.99	(1.13)	-4.76	(2.27)
27	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	12.00	(11.86)	-4.83	(2.28)
28	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	13.24	(10.72)	-5.11	(2.29)
29	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	25.28	(25.27)	-5.57	(2.29)
30	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	9.46	(8.46)	-6.38	(2.44)
31	0.00	(0.00)	0.0	(0.0)	0.00	(0.00)	0.18	(0.12)	-6.62	(2.45)
32	0.01	(0.00)	0.0	(0.0)	0.02	(0.00)	27.55	(24.18)	-7.14	(2.62)
33	0.03	(0.00)	0.0	(0.0)	0.04	(0.01)	2.23	(1.46)	-7.98	(3.05)
34	0.06	(0.00)	0.01	(0.01)	0.10	(0.01)	0.34	(0.29)	-8.02	(3.07)
35	0.09	(0.00)	0.01	(0.01)	0.14	(0.01)	5.95	(4.70)	-8.10	(3.11)
36	0.12	(0.01)	0.01	(0.01)	0.19	(0.01)	0.38	(0.31)	-8.18	(3.16)
37	0.14	(0.01)	0.08	(0.07)	0.22	(0.01)	0.37	(0.33)	-8.25	(3.20)
38	0.17	(0.01)	0.03	(0.03)	0.27	(0.02)	0.15	(0.12)	-8.32	(3.23)
39	0.20	(0.01)	0.11	(0.06)	0.30	(0.02)	25.85	(25.14)	-8.69	(3.24)
40	0.23	(0.01)	0.11	(0.05)	0.34	(0.02)	4.97	(4.91)	-9.55	(3.36)
41	0.25	(0.01)	0.24	(0.09)	0.38	(0.02)	0.48	(0.28)	-9.63	(3.39)
42	0.27	(0.01)	0.30	(0.10)	0.42	(0.02)	0.05	(0.03)	-9.73	(3.43)
43	0.30	(0.01)	0.63	(0.34)	0.46	(0.02)	7.62	(7.28)	-9.98	(3.50)
44	0.33	(0.01)	0.54	(0.27)	0.49	(0.02)	36.60	(22.70)	-10.83	(3.76)
45	0.35	(0.01)	0.65	(0.28)	0.53	(0.02)	5.02	(4.84)	-11.97	(4.10)
46	0.37	(0.01)	0.78	(0.31)	0.57	(0.02)	3.55	(2.42)	-12.10	(4.15)
47	0.40	(0.01)	0.88	(0.31)	0.60	(0.02)	36.74	(36.74)	-12.90	(4.17)
48	0.41	(0.01)	1.19	(0.47)	0.63	(0.02)	14.07	(12.61)	-14.52	(4.44)
49	0.43	(0.01)	0.95	(0.29)	0.67	(0.02)	0.15	(0.15)	-15.14	(4.50)
50	0.45	(0.01)	1.54	(0.67)	0.70	(0.02)	27.33	(16.88)	-15.62	(4.55)

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES
(CONTINUED)
TABLE 2- 6: SUMMARY OF ANNUAL PCLTF EXPENDITURES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	MONITORING		RESPONSE		POST-CLOSURE CARE		CLAIMS		INTEREST PAYMENTS	
YEAR	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)
51	0.47	(0.01)	1.18	(0.34)	0.72	(0.02)	6.88	(6.75)	-16.64	(4.60)
52	0.49	(0.01)	1.14	(0.34)	0.75	(0.02)	0.56	(0.34)	-16.99	(4.64)
53	0.50	(0.01)	1.05	(0.31)	0.77	(0.02)	92.67	(92.62)	-19.15	(5.24)
54	0.52	(0.01)	1.04	(0.31)	0.80	(0.02)	0.05	(0.05)	-22.55	(7.27)
55	0.53	(0.01)	1.08	(0.25)	0.82	(0.02)	9.52	(8.90)	-22.86	(7.36)
56	0.54	(0.01)	1.27	(0.31)	0.84	(0.02)	1.00	(1.00)	-23.33	(7.45)
57	0.56	(0.01)	1.27	(0.29)	0.86	(0.02)	21.05	(20.93)	-23.98	(7.51)
58	0.58	(0.01)	1.30	(0.28)	0.89	(0.02)	0.03	(0.02)	-24.99	(7.58)
59	0.58	(0.01)	1.29	(0.28)	0.92	(0.03)	36.87	(36.52)	-25.78	(7.63)
60	0.60	(0.01)	1.26	(0.28)	0.94	(0.03)	0.03	(0.03)	-27.27	(7.74)
61	0.61	(0.01)	1.15	(0.23)	0.96	(0.03)	1.58	(1.58)	-27.66	(7.83)
62	0.62	(0.01)	1.47	(0.43)	0.99	(0.03)	0.36	(0.29)	-28.07	(7.92)
63	0.64	(0.01)	1.86	(0.50)	1.00	(0.03)	39.48	(32.39)	-29.20	(7.99)
64	0.65	(0.01)	2.27	(0.52)	1.02	(0.03)	5.32	(3.96)	-30.93	(8.19)
65	0.66	(0.01)	2.46	(0.62)	1.03	(0.03)	0.48	(0.35)	-31.55	(8.35)
66	0.66	(0.01)	2.22	(0.49)	1.04	(0.03)	5.23	(3.38)	-32.02	(8.46)
67	0.67	(0.01)	2.25	(0.48)	1.06	(0.03)	1.74	(1.59)	-32.51	(8.57)
68	0.69	(0.01)	2.15	(0.45)	1.08	(0.03)	0.02	(0.01)	-33.02	(8.67)
69	0.69	(0.01)	1.99	(0.43)	1.09	(0.03)	0.00	(0.00)	-33.47	(8.78)
70	0.70	(0.01)	2.10	(0.42)	1.11	(0.03)	11.90	(11.84)	-34.18	(8.87)
71	0.70	(0.01)	2.06	(0.42)	1.12	(0.03)	0.0	(0.0)	-35.05	(8.97)
72	0.72	(0.01)	2.25	(0.42)	1.13	(0.03)	102.08	(102.03)	-37.67	(9.42)
73	0.72	(0.01)	2.19	(0.41)	1.14	(0.03)	0.07	(0.04)	-41.67	(10.98)
74	0.73	(0.01)	2.25	(0.41)	1.16	(0.03)	11.67	(10.56)	-42.47	(11.24)
75	0.74	(0.01)	2.30	(0.41)	1.17	(0.03)	36.92	(36.90)	-44.20	(11.59)
76	0.74	(0.01)	2.31	(0.42)	1.18	(0.03)	0.08	(0.06)	-46.08	(11.84)
77	0.75	(0.01)	2.29	(0.39)	1.19	(0.03)	0.05	(0.05)	-46.73	(11.98)
78	0.75	(0.01)	2.29	(0.39)	1.20	(0.03)	12.54	(10.72)	-47.65	(12.09)
79	0.76	(0.01)	2.53	(0.45)	1.21	(0.03)	3.32	(2.65)	-48.80	(12.21)
80	0.77	(0.01)	2.54	(0.45)	1.22	(0.03)	2.89	(2.89)	-49.65	(12.38)
81	0.77	(0.01)	2.60	(0.46)	1.23	(0.03)	56.86	(56.82)	-51.63	(12.59)
82	0.78	(0.01)	2.57	(0.45)	1.23	(0.03)	0.02	(0.02)	-54.28	(13.04)
83	0.78	(0.01)	2.61	(0.46)	1.24	(0.03)	0.37	(0.31)	-55.05	(13.19)
84	0.79	(0.01)	2.49	(0.43)	1.25	(0.03)	0.0	(0.0)	-55.84	(13.34)
85	0.79	(0.01)	2.55	(0.42)	1.26	(0.03)	0.03	(0.03)	-56.62	(13.49)
86	0.80	(0.01)	2.67	(0.47)	1.27	(0.03)	2.86	(2.00)	-57.47	(13.63)
87	0.80	(0.01)	2.69	(0.46)	1.28	(0.03)	0.06	(0.04)	-58.38	(13.77)
88	0.80	(0.01)	2.79	(0.44)	1.28	(0.03)	58.75	(40.41)	-60.43	(13.81)
89	0.81	(0.01)	2.79	(0.47)	1.29	(0.03)	0.00	(0.00)	-63.27	(13.91)
90	0.81	(0.01)	2.79	(0.47)	1.29	(0.03)	61.99	(61.97)	-65.44	(14.29)
91	0.82	(0.01)	2.90	(0.49)	1.30	(0.03)	0.25	(0.23)	-68.45	(15.07)
92	0.82	(0.01)	2.86	(0.43)	1.30	(0.03)	24.43	(17.35)	-69.89	(15.24)
93	0.82	(0.01)	2.89	(0.44)	1.31	(0.03)	87.32	(86.94)	-73.18	(15.25)
94	0.83	(0.01)	2.86	(0.44)	1.32	(0.03)	0.33	(0.33)	-77.06	(15.50)
95	0.83	(0.01)	2.88	(0.43)	1.32	(0.03)	0.02	(0.02)	-78.12	(15.67)
96	0.83	(0.01)	3.11	(0.46)	1.33	(0.03)	0.0	(0.0)	-79.20	(15.84)
97	0.84	(0.01)	2.91	(0.45)	1.34	(0.03)	0.0	(0.0)	-80.28	(16.02)
98	0.84	(0.01)	3.19	(0.57)	1.34	(0.03)	0.37	(0.33)	-81.39	(16.19)
99	0.84	(0.01)	3.09	(0.56)	1.35	(0.03)	4.66	(3.16)	-82.62	(16.38)
100	0.85	(0.01)	3.10	(0.56)	1.36	(0.03)	0.02	(0.02)	-83.91	(16.59)

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 7A: FREQUENCY OF RELEASES AT FACILITIES
X = EXPECTED RELEASES; S = SIMULATED RELEASES; D = DETECTED RELEASES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

YEARS	IP ON			DETECTABLE ON			TOXIC ON			TASTE/ODOR			DETECTABLE OFF			TOXIC OFF			BATHTUB		
	X	S	D	X	S	D	X	S	D	X	S	D	X	S	D	X	S	D	X	S	D
< 1	472	472	--	458	458	--	373	373	--	54	54	--	70	70	--	60	60	--	0	0	--
1 - 10	60	59	401	71	69	332	65	64	260	31	30	42	41	40	87	34	33	69	0	0	0
11 - 20	14	13	11	35	32	25	31	28	17	28	27	18	38	36	31	33	31	23	0	0	0
21 - 30	11	9	7	29	26	16	26	23	12	24	22	15	34	31	26	27	25	17	0	0	0
31 - 40	11	9	6	26	23	10	21	18	8	20	11	7	31	14	9	24	14	8	0	0	0
41 - 50	10	9	5	22	19	7	20	16	6	17	6	4	29	9	4	20	7	4	0	0	0
51 - 60	10	9	4	20	17	5	18	15	5	13	5	2	25	9	2	18	6	2	0	0	0
61 - 70	8	7	4	14	12	4	14	11	4	10	5	3	19	7	3	14	5	2	0	0	0
71 - 80	7	6	3	12	10	3	12	9	3	7	3	2	13	5	2	10	4	1	0	0	0
81 - 90	7	6	3	8	7	2	9	7	2	5	2	1	8	4	2	6	3	1	0	0	0
91 -100	5	4	2	7	5	2	7	5	1	3	2	1	5	2	1	4	2	1	0	0	0
101 -150	11	--	--	8	--	--	11	--	--	3	--	--	4	--	--	4	--	--	0	--	--
>150	11	--	--	10	--	--	9	--	--	1	--	--	1	--	--	1	--	--	0	--	--
TOTAL	637	603	446	720	678	406	616	569	318	216	167	95	318	227	167	255	190	128	0	0	0

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 7B: FREQUENCY OF RELEASES AT FACILITIES WITH QUALIFICATION STATUS PENDING
S = SIMULATED RELEASES; D = DETECTED RELEASES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

YEARS	IP ON		DETECTABLE ON		TOXIC ON		TASTE/ODOR		DETECTABLE OFF		TOXIC OFF		BATHTUB	
	S	D	S	D	S	D	S	D	S	D	S	D	S	D
1 - 10	52	279	58	228	53	178	23	29	31	61	26	49	0	0
11 - 20	7	7	16	16	15	11	13	9	18	15	15	11	0	0
21 - 30	3	4	10	8	9	7	8	6	11	9	9	6	0	0
31 - 40	2	3	6	5	5	4	3	2	4	3	4	3	0	0
41 - 50	2	2	4	3	3	2	1	1	2	1	1	1	0	0
51 - 60	1	1	3	2	2	2	1	0	1	0	1	0	0	0
61 - 70	1	1	2	2	1	1	1	1	1	1	1	1	0	0
71 - 80	1	1	1	1	1	1	0	0	1	0	0	0	0	0
81 - 90	1	1	1	1	1	0	0	0	0	0	0	0	0	0
91 -100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	70	299	101	266	90	206	50	48	69	90	57	71	0	0

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 7C: FREQUENCY OF RELEASES AT QUALIFIED FACILITIES
S = SIMULATED RELEASES; D = DETECTED RELEASES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

	IP ON		DETECTABLE ON		TOXIC ON		TASTE/ODOR		DETECTABLE OFF		TOXIC OFF		BATHTUB	
YEARS	S	D	S	D	S	D	S	D	S	D	S	D	S	D
1 - 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 - 20	2	1	2	1	2	0	1	1	2	1	1	0	0	0
21 - 30	3	2	4	1	4	1	2	1	3	1	2	1	0	0
31 - 40	3	3	6	2	5	2	2	2	3	2	3	1	0	0
41 - 50	4	2	5	2	5	2	2	1	3	2	2	1	0	0
51 - 60	4	3	6	2	5	2	2	1	4	1	3	1	0	0
61 - 70	3	2	5	2	4	2	2	1	3	1	2	1	0	0
71 - 80	2	1	4	1	3	1	1	1	2	1	2	1	0	0
81 - 90	3	2	3	1	3	1	1	1	2	1	1	0	0	0
91 -100	2	2	2	1	3	1	1	1	1	1	1	0	0	0
TOTAL	26	18	37	13	34	12	14	10	23	11	17	6	0	0

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 7D: FREQUENCY OF RELEASES AT UNQUALIFIED FACILITIES
S = SIMULATED RELEASES; D = DETECTED RELEASES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

YEARS	IP ON		DETECTABLE ON		TOXIC ON		TASTE/ODOR		DETECTABLE OFF		TOXIC OFF		BATHIUB	
	S	D	S	D	S	D	S	D	S	D	S	D	S	D
1 - 10	7	122	11	104	11	82	7	13	9	26	7	20	0	0
11 - 20	4	3	13	9	11	6	13	8	17	15	15	11	0	0
21 - 30	3	2	12	6	11	4	13	8	17	15	14	10	0	0
31 - 40	3	1	11	3	9	3	5	3	7	4	8	5	0	0
41 - 50	3	1	10	1	8	2	3	2	4	2	4	2	0	0
51 - 60	3	1	9	1	7	1	3	1	3	1	3	1	0	0
61 - 70	3	1	6	1	6	1	2	1	3	1	2	0	0	0
71 - 80	3	1	5	1	5	0	2	1	2	1	2	0	0	0
81 - 90	2	0	3	0	3	0	1	1	2	1	2	0	0	0
91 -100	1	0	3	0	2	0	1	0	1	0	1	0	0	0
TOTAL	32	132	83	126	73	99	50	38	65	66	58	49	0	0

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 8A: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
1	4.59	0.00	0.01	0.0	0.0	0.0	0.0
2	4.85	6.35	0.06	111.15	2.37	2.87	0.46
3	6.00	35.04	0.13	989.47	10.30	18.89	3.74
4	5.13	54.28	0.33	724.21	10.43	25.35	6.30
5	4.84	73.33	0.53	1171.87	12.50	26.34	6.21
6	4.27	88.82	0.71	950.23	6.29	22.60	6.00
7	2.74	79.69	0.78	245.04	7.75	8.24	4.06
8	2.62	69.97	0.82	115.62	2.42	7.76	0.94
9	2.49	60.62	0.73	122.25	3.21	5.35	0.82
10	2.35	49.75	0.65	212.84	3.19	4.24	1.00
11	2.22	39.78	0.57	121.48	0.58	3.98	0.69
12	2.13	38.02	0.53	117.71	1.46	3.92	0.86
13	2.04	39.04	0.50	109.19	3.13	3.15	0.75
14	1.94	37.70	0.49	99.54	4.43	1.31	0.73
15	1.86	36.48	0.49	137.50	1.24	3.10	0.52
16	1.78	35.31	0.48	110.34	2.03	2.38	0.73
17	1.72	34.90	0.47	77.11	2.68	2.34	0.52
18	1.63	33.72	0.45	208.44	1.07	5.00	0.77
19	1.58	33.06	0.45	73.81	1.30	1.92	0.82
20	1.50	31.75	0.41	161.81	1.33	3.98	0.50
21	1.46	31.02	0.40	134.94	2.50	2.61	0.46
22	1.39	29.93	0.37	132.49	0.57	3.86	0.42
23	1.33	28.73	0.34	34.53	3.27	2.23	0.36
24	1.27	28.21	0.32	121.60	1.69	3.69	0.40
25	1.22	27.89	0.30	140.97	0.76	2.82	0.38
26	1.17	27.20	0.28	19.29	0.33	0.72	0.23
27	1.14	26.29	0.26	30.00	0.14	0.55	0.27
28	1.09	25.71	0.28	67.08	0.58	0.84	0.36
29	1.06	25.03	0.28	83.10	0.30	1.93	0.31
30	1.02	24.61	0.29	127.68	1.56	1.36	0.29
31	0.99	24.18	0.30	244.76	0.43	2.11	0.31
32	0.95	23.12	0.30	15.56	0.34	0.24	0.15
33	0.91	22.56	0.28	59.09	0.55	0.80	0.29
34	0.89	22.12	0.26	4.36	0.13	1.66	0.08
35	0.86	21.41	0.23	24.60	0.55	0.70	0.17
36	0.84	20.82	0.21	35.85	0.03	0.31	0.04
37	0.80	20.22	0.19	0.0	0.08	0.07	0.02
38	0.78	19.29	0.19	25.55	2.06	1.36	0.25
39	0.76	19.23	0.18	102.07	2.73	2.30	0.21
40	0.73	18.07	0.18	0.0	0.03	0.63	0.08
41	0.72	17.26	0.18	0.40	0.03	0.06	0.02
42	0.70	16.85	0.18	0.0	0.00	0.01	0.02
43	0.68	15.91	0.17	0.0	0.0	1.56	0.02
44	0.66	15.13	0.16	28.65	0.13	0.07	0.10
45	0.64	14.69	0.16	33.59	0.04	0.70	0.04
46	0.63	14.15	0.15	3.50	0.01	0.01	0.06
47	0.62	13.86	0.13	0.0	0.10	0.01	0.06
48	0.60	13.18	0.14	17.44	0.01	0.0	0.04
49	0.58	12.90	0.13	0.25	0.01	0.01	0.02
50	0.56	12.59	0.12	0.01	0.00	0.31	0.02

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 8A: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
51	0.55	12.15	0.12	0.14	0.01	0.0	0.06
52	0.55	11.95	0.12	0.0	0.0	0.0	0.0
53	0.54	11.38	0.11	0.0	0.00	0.03	0.0
54	0.53	10.98	0.10	1.05	0.10	0.03	0.02
55	0.53	11.00	0.10	8.46	0.01	0.31	0.02
56	0.52	10.12	0.10	2.96	0.0	0.0	0.02
57	0.51	9.88	0.10	0.0	0.0	0.07	0.0
58	0.51	9.56	0.09	0.14	0.00	0.0	0.02
59	0.50	9.37	0.09	0.07	0.00	0.05	0.02
60	0.49	9.47	0.08	10.73	0.01	0.0	0.04
61	0.49	8.97	0.08	58.11	0.01	0.31	0.06
62	0.49	8.65	0.08	0.0	0.00	0.07	0.02
63	0.48	8.41	0.08	0.00	0.03	0.0	0.04
64	0.48	8.42	0.08	60.35	0.04	0.37	0.02
65	0.47	8.27	0.09	0.80	0.03	0.0	0.04
66	0.47	7.92	0.09	0.00	0.15	0.31	0.06
67	0.47	7.58	0.09	0.0	0.00	0.31	0.02
68	0.46	7.19	0.09	0.0	0.00	0.0	0.0
69	0.46	7.00	0.09	0.37	0.0	0.01	0.04
70	0.46	6.91	0.10	0.0	0.0	0.0	0.0
71	0.45	6.53	0.09	0.0	0.00	0.0	0.02
72	0.45	6.29	0.08	0.0	0.00	0.0	0.02
73	0.44	6.42	0.08	5.83	0.08	0.39	0.06
74	0.44	6.82	0.07	40.66	0.16	0.31	0.02
75	0.44	6.28	0.06	0.0	0.0	0.0	0.0
76	0.42	5.87	0.06	36.57	0.01	0.33	0.02
77	0.42	5.65	0.06	0.0	0.0	0.0	0.0
78	0.42	5.56	0.06	0.0	0.0	0.0	0.0
79	0.42	5.38	0.07	0.0	0.0	0.0	0.0
80	0.42	5.29	0.07	0.0	0.0	0.0	0.0
81	0.42	5.18	0.07	0.0	0.0	0.0	0.02
82	0.41	5.13	0.06	0.0	0.01	0.0	0.0
83	0.41	4.93	0.07	0.0	0.01	0.0	0.0
84	0.40	4.83	0.07	0.0	0.0	0.0	0.02
85	0.40	4.67	0.07	0.18	0.02	0.01	0.04
86	0.40	4.65	0.07	0.0	0.00	0.31	0.0
87	0.39	4.56	0.08	0.0	0.00	0.0	0.02
88	0.39	4.31	0.07	0.0	0.0	0.0	0.02
89	0.39	4.13	0.07	0.0	0.0	0.0	0.0
90	0.39	4.06	0.07	0.0	0.0	0.0	0.0
91	0.38	3.91	0.07	0.0	0.0	0.0	0.0
92	0.38	3.87	0.07	0.0	0.0	0.0	0.0
93	0.38	3.77	0.08	0.02	0.01	0.0	0.04
94	0.38	4.05	0.09	0.0	0.01	0.01	0.0
95	0.37	3.70	0.09	0.0	0.0	0.0	0.0
96	0.37	3.55	0.09	1.88	0.01	0.03	0.02
97	0.37	3.87	0.09	0.93	0.05	0.03	0.02
98	0.36	3.69	0.08	0.0	0.0	0.0	0.0
99	0.36	3.50	0.07	0.0	0.0	0.0	0.0
100	0.36	3.27	0.07	0.0	0.0	0.0	0.0

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 8B: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.00	0.0	0.01	0.0	0.0	0.0	0.0
7	0.01	0.0	0.03	0.0	0.0	0.0	0.0
8	0.03	0.0	0.06	0.0	0.0	0.0	0.0
9	0.07	0.01	0.12	0.0	0.0	0.0	0.0
10	0.11	0.02	0.19	0.0	0.00	0.0	0.02
11	0.16	0.09	0.25	0.0	0.0	0.0	0.0
12	0.20	0.14	0.31	0.0	0.0	0.0	0.0
13	0.24	0.14	0.37	10.07	0.00	0.31	0.02
14	0.28	0.39	0.42	0.0	0.00	0.09	0.04
15	0.31	0.27	0.47	0.13	0.13	0.34	0.02
16	0.34	0.35	0.52	0.13	0.07	0.33	0.04
17	0.38	0.79	0.57	20.61	0.04	0.63	0.02
18	0.40	0.69	0.61	0.0	0.02	0.33	0.0
19	0.43	1.22	0.65	0.0	0.00	0.31	0.02
20	0.46	1.17	0.69	25.61	0.14	0.01	0.02
21	0.48	1.20	0.73	58.25	0.42	0.69	0.13
22	0.51	1.27	0.77	0.03	0.04	1.96	0.04
23	0.52	1.14	0.81	6.55	0.00	0.0	0.04
24	0.55	1.35	0.85	0.04	0.00	0.31	0.02
25	0.57	1.15	0.88	0.15	0.01	0.0	0.02
26	0.59	1.24	0.90	1.22	0.36	0.33	0.08
27	0.60	1.25	0.94	11.52	0.07	0.35	0.06
28	0.62	1.53	0.95	12.39	0.44	0.37	0.04
29	0.64	1.48	0.98	24.62	0.00	0.64	0.02
30	0.65	1.89	1.00	8.14	0.30	0.98	0.04
31	0.66	1.75	1.02	0.0	0.07	0.10	0.0
32	0.68	1.77	1.02	27.12	0.26	0.09	0.08
33	0.67	2.04	1.04	1.66	0.29	0.20	0.08
34	0.68	1.93	1.05	0.28	0.01	0.0	0.04
35	0.70	2.12	1.07	5.48	0.00	0.42	0.04
36	0.70	2.17	1.09	0.0	0.00	0.31	0.06
37	0.71	2.35	1.10	0.0	0.02	0.31	0.04
38	0.71	2.67	1.11	0.08	0.04	0.01	0.02
39	0.73	2.40	1.13	25.14	0.04	0.63	0.04
40	0.73	2.41	1.14	4.83	0.00	0.07	0.06
41	0.74	3.05	1.15	0.30	0.01	0.05	0.13
42	0.74	2.93	1.16	0.0	0.01	0.01	0.02
43	0.75	3.06	1.18	7.26	0.03	0.31	0.02
44	0.76	3.02	1.19	36.08	0.10	0.31	0.10
45	0.76	3.04	1.20	4.93	0.02	0.01	0.06
46	0.77	3.09	1.21	1.86	0.02	1.59	0.08
47	0.78	3.17	1.22	36.40	0.01	0.31	0.02
48	0.79	3.48	1.24	13.18	0.13	0.66	0.10
49	0.79	3.38	1.25	0.12	0.01	0.0	0.02
50	0.81	4.17	1.26	23.46	1.22	2.55	0.10

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 8B: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
51	0.81	3.79	1.27	6.68	0.07	0.07	0.06
52	0.81	4.08	1.28	0.03	0.10	0.37	0.06
53	0.82	4.00	1.29	91.02	0.05	1.58	0.02
54	0.82	3.93	1.30	0.03	0.00	0.0	0.02
55	0.83	4.21	1.31	8.02	1.01	0.42	0.06
56	0.82	4.19	1.31	0.88	0.07	0.03	0.02
57	0.84	4.22	1.32	20.59	0.02	0.37	0.06
58	0.85	4.25	1.33	0.0	0.01	0.0	0.02
59	0.83	4.53	1.34	36.51	0.00	0.31	0.04
60	0.85	4.15	1.35	0.0	0.01	0.0	0.02
61	0.85	4.08	1.35	0.0	0.02	1.56	0.0
62	0.86	4.51	1.36	0.00	0.22	0.07	0.06
63	0.86	4.77	1.36	38.83	0.07	0.50	0.08
64	0.86	5.17	1.37	4.95	0.16	0.09	0.13
65	0.86	5.36	1.38	0.0	0.09	0.39	0.0
66	0.86	5.14	1.38	4.80	0.00	0.33	0.10
67	0.87	5.12	1.39	0.0	0.10	1.62	0.02
68	0.88	5.06	1.39	0.0	0.00	0.01	0.0
69	0.88	4.90	1.40	0.0	0.00	0.0	0.0
70	0.88	5.05	1.41	11.51	0.02	0.31	0.06
71	0.88	5.00	1.41	0.0	0.0	0.0	0.0
72	0.89	5.18	1.42	101.98	0.03	0.05	0.02
73	0.89	5.10	1.43	0.0	0.01	0.0	0.06
74	0.89	5.27	1.43	11.22	0.07	0.31	0.06
75	0.89	5.28	1.44	36.56	0.00	0.31	0.04
76	0.90	5.32	1.45	0.0	0.00	0.05	0.02
77	0.90	5.33	1.46	0.0	0.02	0.03	0.0
78	0.90	5.39	1.46	12.17	0.01	0.31	0.04
79	0.91	5.51	1.47	2.60	0.05	0.63	0.04
80	0.91	5.53	1.47	2.81	0.0	0.05	0.02
81	0.91	5.57	1.47	56.48	0.01	0.35	0.02
82	0.92	5.54	1.48	0.0	0.0	0.0	0.02
83	0.92	5.57	1.49	0.0	0.01	0.34	0.02
84	0.93	5.46	1.50	0.0	0.0	0.0	0.0
85	0.92	5.53	1.51	0.0	0.01	0.0	0.02
86	0.93	5.66	1.52	2.78	0.01	0.0	0.06
87	0.93	5.69	1.52	0.0	0.02	0.03	0.0
88	0.93	5.78	1.53	57.94	0.08	0.66	0.06
89	0.93	5.79	1.54	0.0	0.00	0.0	0.0
90	0.94	5.79	1.55	61.61	0.04	0.31	0.02
91	0.95	5.89	1.55	0.19	0.01	0.01	0.04
92	0.95	5.85	1.56	23.16	0.82	0.39	0.06
93	0.95	5.87	1.57	85.37	0.00	1.93	0.02
94	0.95	5.85	1.57	0.0	0.02	0.31	0.0
95	0.95	5.87	1.58	0.0	0.00	0.0	0.02
96	0.95	6.10	1.59	0.0	0.0	0.0	0.0
97	0.96	5.90	1.60	0.0	0.0	0.0	0.0
98	0.97	6.20	1.62	0.0	0.02	0.33	0.02
99	0.96	6.09	1.63	1.89	2.70	0.0	0.06
100	0.97	6.10	1.64	0.0	0.0	0.0	0.02

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 8C: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
1	0.48	4.99	0.29	119.40	1.93	3.03	0.92
2	1.03	10.85	0.79	125.60	1.19	5.05	0.63
3	1.56	22.14	1.24	291.10	6.36	10.24	2.18
4	1.66	30.07	1.57	652.36	10.57	11.48	2.53
5	1.58	35.08	1.86	460.67	2.12	13.05	2.03
6	1.47	41.82	1.83	438.90	6.39	9.33	1.55
7	0.97	35.83	1.82	83.97	2.01	8.33	1.55
8	0.96	32.07	1.83	18.12	0.33	1.12	0.23
9	0.97	31.65	1.89	172.80	0.59	3.10	0.31
10	1.00	31.51	1.97	176.30	4.41	3.93	0.50
11	1.04	32.31	2.06	513.96	1.07	5.56	0.92
12	1.06	33.67	2.11	344.86	1.21	5.34	0.56
13	1.07	35.69	2.16	94.11	0.57	1.68	0.65
14	1.07	38.19	2.20	106.23	1.13	3.74	0.54
15	1.10	40.09	2.23	282.14	1.19	6.85	0.67
16	1.08	40.91	2.26	95.35	5.00	3.67	0.67
17	1.09	42.58	2.30	315.83	2.03	7.50	0.59
18	1.09	44.30	2.33	76.00	5.74	2.81	0.71
19	1.11	46.30	2.37	169.86	1.11	2.25	0.56
20	1.10	47.87	2.41	285.17	1.45	5.87	0.71
21	1.13	49.52	2.44	254.55	2.26	4.06	0.63
22	1.13	51.59	2.47	90.36	2.70	6.18	0.77
23	1.12	52.78	2.49	76.33	1.44	4.64	0.56
24	1.12	53.03	2.53	83.98	0.40	3.69	0.56
25	1.13	53.99	2.55	208.30	2.68	5.40	0.75
26	1.14	55.32	2.58	186.10	4.45	5.89	0.63
27	1.14	56.75	2.60	137.24	1.68	4.76	0.56
28	1.14	57.46	2.60	75.96	4.77	2.14	0.56
29	1.13	59.97	2.61	175.80	4.43	6.35	0.67
30	1.13	61.55	2.60	470.19	3.85	5.82	0.50
31	1.09	61.77	2.52	109.94	1.51	2.25	0.38
32	0.94	62.38	2.34	170.75	1.50	3.25	0.65
33	0.81	63.19	2.19	97.74	0.51	2.07	0.33
34	0.68	63.12	2.07	38.59	0.11	0.75	0.31
35	0.58	63.39	1.98	41.81	0.56	1.12	0.29
36	0.54	64.05	1.97	42.75	0.26	2.14	0.17
37	0.53	64.53	1.98	66.45	0.70	1.70	0.19
38	0.51	65.30	1.99	24.85	0.69	0.58	0.27
39	0.51	65.53	2.01	22.40	0.13	1.02	0.21
40	0.49	66.55	2.02	4.56	0.49	0.09	0.17
41	0.49	67.38	2.03	53.27	0.47	0.36	0.17
42	0.48	67.63	2.03	0.55	0.07	0.08	0.08
43	0.47	68.53	2.05	64.64	0.10	0.75	0.10
44	0.47	69.27	2.05	130.68	0.20	0.05	0.13
45	0.46	70.01	2.06	1.31	0.36	0.36	0.13
46	0.45	70.42	2.07	156.84	0.10	3.30	0.13
47	0.44	71.16	2.08	24.84	0.01	2.28	0.08
48	0.44	71.77	2.08	2.71	0.03	1.70	0.17
49	0.43	72.68	2.09	5.37	0.52	0.16	0.04
50	0.42	72.76	2.09	0.60	0.02	0.33	0.06

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 8C: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
51	0.41	73.43	2.10	104.70	0.09	1.02	0.13
52	0.40	73.35	2.10	26.77	0.07	0.31	0.06
53	0.40	73.86	2.11	18.81	1.94	0.03	0.06
54	0.40	74.21	2.11	0.71	0.02	0.0	0.02
55	0.39	74.36	2.11	0.0	0.01	0.31	0.02
56	0.38	74.89	2.13	0.28	0.02	0.33	0.02
57	0.38	75.07	2.13	0.0	0.03	0.31	0.04
58	0.37	75.61	2.13	42.12	0.11	0.34	0.10
59	0.37	75.91	2.13	21.73	0.00	0.31	0.04
60	0.37	76.11	2.13	83.81	0.04	0.03	0.04
61	0.36	76.38	2.14	109.39	0.00	0.0	0.04
62	0.36	77.05	2.14	0.99	0.06	0.01	0.04
63	0.35	77.16	2.14	0.0	0.04	0.01	0.0
64	0.36	77.23	2.14	0.0	0.0	0.0	0.02
65	0.35	77.80	2.14	30.74	4.34	0.94	0.04
66	0.35	78.19	2.14	0.0	0.12	0.64	0.02
67	0.34	78.60	2.15	6.25	0.00	0.07	0.02
68	0.34	78.89	2.16	0.0	0.01	0.01	0.0
69	0.33	79.02	2.16	0.0	0.00	0.0	0.02
70	0.33	79.00	2.16	0.13	0.00	0.01	0.06
71	0.33	79.26	2.16	0.01	0.0	0.0	0.04
72	0.32	79.50	2.17	0.0	0.03	0.31	0.0
73	0.32	79.81	2.17	4.05	0.14	1.63	0.04
74	0.33	79.99	2.18	16.65	1.93	0.01	0.02
75	0.32	80.10	2.18	49.18	0.01	0.0	0.02
76	0.32	80.72	2.18	31.46	0.11	0.94	0.08
77	0.32	80.83	2.18	0.0	0.00	0.0	0.02
78	0.32	80.92	2.18	0.0	0.0	0.13	0.02
79	0.32	80.98	2.18	0.0	0.01	0.31	0.02
80	0.31	81.08	2.19	0.23	0.01	1.88	0.02
81	0.31	81.05	2.19	0.0	0.00	0.31	0.0
82	0.31	81.15	2.18	86.52	0.01	1.57	0.04
83	0.30	81.32	2.19	0.0	0.0	0.0	0.02
84	0.30	81.44	2.19	0.0	0.0	0.0	0.0
85	0.31	81.61	2.19	0.0	0.01	0.33	0.0
86	0.30	81.67	2.19	0.0	0.00	0.05	0.02
87	0.30	81.76	2.19	116.64	0.01	1.56	0.06
88	0.30	82.08	2.20	0.0	0.00	0.05	0.02
89	0.29	82.22	2.20	0.0	0.01	0.63	0.0
90	0.29	82.27	2.20	0.0	0.00	0.37	0.0
91	0.29	82.48	2.19	7.39	0.13	0.09	0.06
92	0.29	82.51	2.19	0.17	0.08	0.07	0.02
93	0.29	82.57	2.19	2.25	0.01	0.05	0.04
94	0.28	82.58	2.19	0.0	0.0	0.0	0.0
95	0.29	82.63	2.19	0.0	0.0	0.0	0.0
96	0.28	82.74	2.20	2.47	0.19	0.05	0.02
97	0.28	82.74	2.19	0.0	0.0	0.0	0.0
98	0.28	83.07	2.19	0.0	0.00	0.05	0.0
99	0.28	83.15	2.20	22.10	0.47	0.07	0.04
100	0.28	83.38	2.20	9.22	0.04	0.39	0.02

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 9A: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	4.8	0.0	0.0	0.0	6.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
3	6.0	0.0	0.0	0.0	34.0	0.0	0.1	0.9	0.1	0.0	0.0	0.0
4	5.1	0.0	0.0	0.1	50.0	0.0	0.4	3.9	0.3	0.0	0.0	0.0
5	4.7	0.0	0.0	0.1	64.1	0.0	0.9	8.3	0.5	0.0	0.0	0.0
6	4.1	0.0	0.0	0.1	76.4	0.0	1.2	11.2	0.7	0.0	0.0	0.0
7	2.7	0.0	0.0	0.1	66.1	0.0	1.4	12.2	0.8	0.0	0.0	0.0
8	2.6	0.0	0.0	0.1	57.5	0.0	1.2	11.2	0.8	0.0	0.0	0.0
9	2.4	0.0	0.0	0.0	52.1	0.0	0.9	7.7	0.7	0.0	0.0	0.0
10	2.3	0.0	0.0	0.0	44.4	0.0	0.5	4.8	0.6	0.0	0.0	0.0
11	2.2	0.0	0.0	0.0	36.5	0.0	0.3	2.9	0.6	0.0	0.0	0.0
12	2.1	0.0	0.0	0.0	35.8	0.0	0.2	2.0	0.5	0.0	0.0	0.0
13	2.0	0.0	0.0	0.0	37.0	0.0	0.2	1.8	0.5	0.0	0.0	0.0
14	1.9	0.0	0.0	0.0	35.7	0.0	0.2	1.8	0.5	0.0	0.0	0.0
15	1.8	0.0	0.0	0.0	34.6	0.0	0.2	1.7	0.5	0.0	0.0	0.0
16	1.8	0.0	0.0	0.0	33.7	0.0	0.2	1.4	0.5	0.0	0.0	0.0
17	1.7	0.0	0.0	0.0	33.4	0.0	0.2	1.4	0.5	0.0	0.0	0.0
18	1.6	0.0	0.0	0.0	32.3	0.0	0.1	1.3	0.4	0.0	0.0	0.0
19	1.6	0.0	0.0	0.0	31.8	0.0	0.1	1.1	0.4	0.0	0.0	0.0
20	1.5	0.0	0.0	0.0	30.7	0.0	0.1	1.0	0.4	0.0	0.0	0.0
21	1.4	0.0	0.0	0.0	30.0	0.0	0.1	1.0	0.4	0.0	0.0	0.0
22	1.4	0.0	0.0	0.0	29.0	0.0	0.1	0.8	0.4	0.0	0.0	0.0
23	1.3	0.0	0.0	0.0	28.0	0.0	0.1	0.7	0.3	0.0	0.0	0.0
24	1.3	0.0	0.0	0.0	27.7	0.0	0.1	0.5	0.3	0.0	0.0	0.0
25	1.2	0.0	0.0	0.0	27.4	0.0	0.0	0.4	0.3	0.0	0.0	0.0
26	1.2	0.0	0.0	0.0	26.8	0.0	0.0	0.4	0.3	0.0	0.0	0.0
27	1.1	0.0	0.0	0.0	25.9	0.0	0.0	0.3	0.3	0.0	0.0	0.0
28	1.1	0.0	0.0	0.0	25.3	0.0	0.0	0.4	0.3	0.0	0.0	0.0
29	1.1	0.0	0.0	0.0	24.7	0.0	0.0	0.3	0.3	0.0	0.0	0.0
30	1.0	0.0	0.0	0.0	24.3	0.0	0.0	0.3	0.3	0.0	0.0	0.0
31	1.0	0.0	0.0	0.0	23.7	0.0	0.0	0.4	0.3	0.0	0.0	0.0
32	0.9	0.0	0.0	0.0	22.6	0.0	0.0	0.4	0.3	0.0	0.0	0.0
33	0.9	0.0	0.0	0.0	21.9	0.0	0.1	0.6	0.3	0.0	0.0	0.0
34	0.9	0.0	0.0	0.0	21.5	0.0	0.1	0.6	0.3	0.0	0.0	0.0
35	0.9	0.0	0.0	0.0	20.7	0.0	0.1	0.6	0.2	0.0	0.0	0.0
36	0.8	0.0	0.0	0.0	20.2	0.0	0.1	0.6	0.2	0.0	0.0	0.0
37	0.8	0.0	0.0	0.0	19.7	0.0	0.1	0.5	0.2	0.0	0.0	0.0
38	0.8	0.0	0.0	0.0	19.0	0.0	0.0	0.3	0.2	0.0	0.0	0.0
39	0.8	0.0	0.0	0.0	18.9	0.0	0.0	0.3	0.2	0.0	0.0	0.0
40	0.7	0.0	0.0	0.0	17.9	0.0	0.0	0.2	0.2	0.0	0.0	0.0
41	0.7	0.0	0.0	0.0	17.1	0.0	0.0	0.2	0.2	0.0	0.0	0.0
42	0.7	0.0	0.0	0.0	16.6	0.0	0.0	0.2	0.2	0.0	0.0	0.0
43	0.7	0.0	0.0	0.0	15.5	0.0	0.0	0.3	0.2	0.0	0.0	0.0
44	0.7	0.0	0.0	0.0	14.8	0.0	0.0	0.3	0.2	0.0	0.0	0.0
45	0.6	0.0	0.0	0.0	14.3	0.0	0.0	0.4	0.2	0.0	0.0	0.0
46	0.6	0.0	0.0	0.0	13.7	0.0	0.0	0.4	0.1	0.0	0.0	0.0
47	0.6	0.0	0.0	0.0	13.5	0.0	0.0	0.3	0.1	0.0	0.0	0.0
48	0.6	0.0	0.0	0.0	12.9	0.0	0.0	0.2	0.1	0.0	0.0	0.0
49	0.6	0.0	0.0	0.0	12.7	0.0	0.0	0.2	0.1	0.0	0.0	0.0
50	0.6	0.0	0.0	0.0	12.4	0.0	0.0	0.2	0.1	0.0	0.0	0.0

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 9A: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.5	0.0	0.0	0.0	12.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
52	0.5	0.0	0.0	0.0	11.8	0.0	0.0	0.1	0.1	0.0	0.0	0.0
53	0.5	0.0	0.0	0.0	11.2	0.0	0.0	0.2	0.1	0.0	0.0	0.0
54	0.5	0.0	0.0	0.0	10.8	0.0	0.0	0.2	0.1	0.0	0.0	0.0
55	0.5	0.0	0.0	0.0	10.8	0.0	0.0	0.2	0.1	0.0	0.0	0.0
56	0.5	0.0	0.0	0.0	10.0	0.0	0.0	0.1	0.1	0.0	-0.0	0.0
57	0.5	0.0	0.0	0.0	9.7	0.0	0.0	0.2	0.1	0.0	0.0	0.0
58	0.5	0.0	0.0	0.0	9.5	0.0	0.0	0.1	0.1	0.0	0.0	0.0
59	0.5	0.0	0.0	0.0	9.3	0.0	0.0	0.1	0.1	0.0	0.0	0.0
60	0.5	0.0	0.0	0.0	9.3	0.0	0.0	0.1	0.1	0.0	0.0	0.0
61	0.5	0.0	0.0	0.0	8.8	0.0	0.0	0.1	0.1	0.0	0.0	0.0
62	0.5	0.0	0.0	0.0	8.5	0.0	0.0	0.1	0.1	0.0	0.0	0.0
63	0.5	0.0	0.0	0.0	8.3	0.0	0.0	0.1	0.1	0.0	0.0	0.0
64	0.5	0.0	0.0	0.0	8.3	0.0	0.0	0.1	0.1	0.0	0.0	0.0
65	0.5	0.0	0.0	0.0	8.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0
66	0.5	0.0	0.0	0.0	7.8	0.0	0.0	0.1	0.1	0.0	0.0	0.0
67	0.5	0.0	0.0	0.0	7.5	0.0	0.0	0.1	0.1	0.0	0.0	0.0
68	0.5	0.0	0.0	0.0	7.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0
69	0.5	0.0	0.0	0.0	6.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
70	0.5	0.0	0.0	0.0	6.9	0.0	0.0	0.1	0.1	0.0	0.0	0.0
71	0.4	0.0	0.0	0.0	6.5	0.0	0.0	0.1	0.1	0.0	0.0	0.0
72	0.5	0.0	0.0	0.0	6.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0
73	0.4	0.0	0.0	0.0	6.3	0.0	0.0	0.1	0.1	0.0	0.0	0.0
74	0.4	0.0	0.0	0.0	6.7	0.0	0.0	0.1	0.1	0.0	0.0	0.0
75	0.4	0.0	0.0	0.0	6.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0
76	0.4	0.0	0.0	0.0	5.8	0.0	0.0	0.1	0.1	0.0	0.0	0.0
77	0.4	0.0	0.0	0.0	5.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
78	0.4	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0
79	0.4	0.0	0.0	0.0	5.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
80	0.4	0.0	0.0	0.0	5.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
81	0.4	0.0	0.0	0.0	5.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
82	0.4	0.0	0.0	0.0	5.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
83	0.4	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
84	0.4	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0
85	0.4	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
86	0.4	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.1	0.0	-0.0	0.0
87	0.4	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0
88	0.4	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
89	0.4	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
90	0.4	0.0	0.0	0.0	4.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
91	0.4	0.0	0.0	0.0	3.8	0.0	0.0	0.1	0.1	0.0	0.0	0.0
92	0.4	0.0	0.0	0.0	3.8	0.0	0.0	0.1	0.1	0.0	0.0	0.0
93	0.4	0.0	0.0	0.0	3.7	0.0	0.0	0.1	0.1	0.0	0.0	0.0
94	0.4	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
95	0.4	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0
96	0.4	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0
97	0.4	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
98	0.4	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0
99	0.4	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.1	0.0	-0.0	0.0
100	0.4	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 9B: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING				RESPONSE				POST-CLOSURE CARE			
	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
10	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
11	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0
12	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0
13	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.0
14	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.4	0.0	0.0	0.0
15	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.5	0.0	0.0	0.0
16	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.5	0.0	0.0	0.0
17	0.4	0.0	0.0	0.0	0.6	0.0	0.0	0.2	0.6	0.0	0.0	0.0
18	0.4	0.0	0.0	0.0	0.5	0.0	0.0	0.2	0.6	0.0	0.0	0.0
19	0.4	0.0	0.0	0.0	1.0	0.0	0.0	0.2	0.6	0.0	0.0	0.0
20	0.5	0.0	0.0	0.0	0.8	0.0	0.0	0.3	0.7	0.0	0.0	0.0
21	0.5	0.0	0.0	0.0	0.8	0.0	0.0	0.4	0.7	0.0	0.0	0.0
22	0.5	0.0	0.0	0.0	0.9	0.0	0.0	0.3	0.8	0.0	0.0	0.0
23	0.5	0.0	0.0	0.0	0.8	0.0	0.0	0.3	0.8	0.0	0.0	0.0
24	0.5	0.0	0.0	0.0	1.1	0.0	0.0	0.3	0.8	0.0	0.0	0.0
25	0.6	0.0	0.0	0.0	0.9	0.0	0.0	0.3	0.9	0.0	0.0	0.0
26	0.6	0.0	0.0	0.0	0.9	0.0	0.0	0.3	0.9	0.0	0.0	0.0
27	0.6	0.0	0.0	0.0	0.9	0.0	0.0	0.3	0.9	0.0	0.0	0.0
28	0.6	0.0	0.0	0.0	1.0	0.0	0.1	0.5	0.9	0.0	0.0	0.0
29	0.6	0.0	0.0	0.0	1.0	0.0	0.1	0.5	1.0	0.0	0.0	0.0
30	0.6	0.0	0.0	0.0	1.1	0.0	0.1	0.8	1.0	0.0	0.0	0.0
31	0.6	0.0	0.0	0.0	1.1	0.0	0.1	0.6	1.0	0.0	0.0	0.0
32	0.7	0.0	0.0	0.0	1.1	0.0	0.1	0.6	1.0	0.0	0.0	0.0
33	0.6	0.0	0.0	0.0	1.4	0.0	0.1	0.6	1.0	0.0	0.0	0.0
34	0.6	0.1	0.0	0.0	1.3	0.0	0.1	0.6	0.9	0.1	0.0	0.0
35	0.6	0.1	0.0	0.0	1.5	0.0	0.1	0.5	0.9	0.1	0.0	0.0
36	0.6	0.1	0.0	0.0	1.5	0.0	0.1	0.6	0.9	0.2	0.0	0.0
37	0.6	0.1	0.0	0.0	1.6	0.1	0.1	0.6	0.9	0.2	0.0	0.0
38	0.5	0.2	0.0	0.0	2.0	0.0	0.1	0.5	0.8	0.3	0.0	0.0
39	0.5	0.2	0.0	0.0	1.6	0.1	0.1	0.6	0.8	0.3	0.0	0.0
40	0.5	0.2	0.0	0.0	1.6	0.1	0.1	0.6	0.8	0.3	0.0	0.0
41	0.5	0.3	0.0	0.0	2.2	0.2	0.1	0.6	0.8	0.4	0.0	0.0
42	0.5	0.3	0.0	0.0	2.0	0.3	0.1	0.6	0.7	0.4	0.0	0.0
43	0.4	0.3	0.0	0.0	1.8	0.6	0.1	0.6	0.7	0.5	0.0	0.0
44	0.4	0.3	0.0	0.0	1.8	0.5	0.1	0.6	0.7	0.5	0.0	0.0
45	0.4	0.4	0.0	0.0	1.8	0.7	0.1	0.6	0.7	0.5	0.0	0.0
46	0.4	0.4	0.0	0.0	1.7	0.8	0.1	0.6	0.6	0.6	0.0	0.0
47	0.4	0.4	0.0	0.0	1.6	0.9	0.1	0.6	0.6	0.6	0.0	0.0
48	0.4	0.4	0.0	0.0	1.6	1.2	0.1	0.6	0.6	0.6	0.0	0.0
49	0.4	0.4	0.0	0.0	1.6	0.9	0.1	0.7	0.6	0.7	0.0	0.0
50	0.3	0.5	0.0	0.0	1.8	1.5	0.1	0.7	0.6	0.7	0.0	0.0

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 9B: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.3	0.5	0.0	0.0	1.8	1.2	0.1	0.7	0.5	0.7	0.0	0.0
52	0.3	0.5	0.0	0.0	2.1	1.1	0.1	0.8	0.5	0.7	0.0	0.0
53	0.3	0.5	0.0	0.0	2.1	1.1	0.1	0.7	0.5	0.8	0.0	0.0
54	0.3	0.5	0.0	0.0	2.1	1.0	0.1	0.7	0.5	0.8	0.0	0.0
55	0.3	0.5	0.0	0.0	2.3	1.1	0.1	0.7	0.5	0.8	0.0	0.0
56	0.3	0.5	0.0	0.0	2.1	1.3	0.1	0.7	0.5	0.8	0.0	0.0
57	0.3	0.6	0.0	0.0	2.1	1.3	0.1	0.8	0.5	0.9	0.0	0.0
58	0.3	0.6	0.0	0.0	2.1	1.3	0.1	0.8	0.4	0.9	0.0	0.0
59	0.2	0.6	0.0	0.0	2.4	1.3	0.1	0.8	0.4	0.9	0.0	0.0
60	0.2	0.6	0.0	0.0	2.0	1.3	0.1	0.8	0.4	0.9	0.0	0.0
61	0.2	0.6	0.0	0.0	2.1	1.1	0.1	0.8	0.4	1.0	0.0	0.0
62	0.2	0.6	0.0	0.0	2.2	1.5	0.1	0.8	0.4	1.0	0.0	0.0
63	0.2	0.6	0.0	0.0	2.1	1.9	0.1	0.8	0.4	1.0	0.0	0.0
64	0.2	0.6	0.0	0.0	2.0	2.3	0.1	0.8	0.3	1.0	0.0	0.0
65	0.2	0.7	0.0	0.0	2.0	2.5	0.1	0.8	0.3	1.0	0.0	0.0
66	0.2	0.7	0.0	0.0	2.1	2.2	0.1	0.8	0.3	1.0	0.0	0.0
67	0.2	0.7	0.0	0.0	2.0	2.2	0.1	0.8	0.3	1.1	0.0	0.0
68	0.2	0.7	0.0	0.0	2.1	2.1	0.1	0.8	0.3	1.1	0.0	0.0
69	0.2	0.7	0.0	0.0	2.0	2.0	0.1	0.8	0.3	1.1	0.0	0.0
70	0.2	0.7	0.0	0.0	2.1	2.1	0.1	0.8	0.3	1.1	0.0	0.0
71	0.2	0.7	0.0	0.0	2.1	2.1	0.1	0.8	0.3	1.1	0.0	0.0
72	0.2	0.7	0.0	0.0	2.1	2.3	0.1	0.8	0.3	1.1	0.0	0.0
73	0.2	0.7	0.0	0.0	2.1	2.2	0.1	0.8	0.3	1.1	0.0	0.0
74	0.2	0.7	0.0	0.0	2.2	2.3	0.1	0.8	0.3	1.2	0.0	0.0
75	0.2	0.7	0.0	0.0	2.1	2.3	0.1	0.8	0.3	1.2	0.0	0.0
76	0.2	0.7	0.0	0.0	2.1	2.3	0.1	0.8	0.3	1.2	0.0	0.0
77	0.1	0.8	0.0	0.0	2.2	2.3	0.1	0.8	0.3	1.2	0.0	0.0
78	0.1	0.8	0.0	0.0	2.2	2.3	0.1	0.8	0.3	1.2	0.0	0.0
79	0.1	0.8	0.0	0.0	2.1	2.5	0.1	0.8	0.2	1.2	0.0	0.0
80	0.1	0.8	0.0	0.0	2.1	2.5	0.1	0.8	0.2	1.2	0.0	0.0
81	0.1	0.8	0.0	0.0	2.1	2.6	0.1	0.8	0.2	1.2	0.0	0.0
82	0.1	0.8	0.0	0.0	2.1	2.6	0.1	0.8	0.2	1.2	0.0	0.0
83	0.1	0.8	0.0	0.0	2.1	2.6	0.1	0.8	0.2	1.2	0.0	0.0
84	0.1	0.8	0.0	0.0	2.1	2.5	0.1	0.8	0.2	1.3	0.0	0.0
85	0.1	0.8	0.0	0.0	2.1	2.5	0.1	0.8	0.2	1.3	0.0	0.0
86	0.1	0.8	0.0	0.0	2.1	2.7	0.1	0.8	0.2	1.3	0.0	0.0
87	0.1	0.8	0.0	0.0	2.1	2.7	0.1	0.8	0.2	1.3	0.0	0.0
88	0.1	0.8	0.0	0.0	2.1	2.8	0.1	0.8	0.2	1.3	0.0	0.0
89	0.1	0.8	0.0	0.0	2.1	2.8	0.1	0.8	0.2	1.3	0.0	0.0
90	0.1	0.8	0.0	0.0	2.1	2.8	0.1	0.8	0.2	1.3	0.0	0.0
91	0.1	0.8	0.0	0.0	2.1	2.9	0.1	0.8	0.2	1.3	0.0	0.0
92	0.1	0.8	0.0	0.0	2.1	2.9	0.1	0.8	0.2	1.3	0.0	0.0
93	0.1	0.8	0.0	0.0	2.0	2.9	0.1	0.8	0.2	1.3	0.0	0.0
94	0.1	0.8	0.0	0.0	2.0	2.9	0.1	0.8	0.2	1.3	0.0	0.0
95	0.1	0.8	0.0	0.0	2.0	2.9	0.1	0.8	0.3	1.3	0.0	0.0
96	0.1	0.8	0.0	0.0	2.0	3.1	0.1	0.9	0.3	1.3	0.0	0.0
97	0.1	0.8	0.0	0.0	2.0	2.9	0.1	0.9	0.3	1.3	0.0	0.0
98	0.1	0.8	0.0	0.0	2.1	3.2	0.1	0.9	0.3	1.3	0.0	0.0
99	0.1	0.8	0.0	0.0	2.0	3.1	0.1	0.9	0.3	1.4	0.0	0.0
100	0.1	0.9	0.0	0.0	2.1	3.1	0.1	0.9	0.3	1.4	0.0	0.0

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 9C: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	0.4	0.0	0.0	0.1	3.3	0.0	0.2	1.5	0.3	0.0	0.0	0.0
2	0.9	0.0	0.0	0.1	8.4	0.0	0.2	2.2	0.8	0.0	0.0	0.0
3	1.5	0.0	0.0	0.1	17.9	0.0	0.4	3.8	1.2	0.0	0.0	0.0
4	1.6	0.0	0.0	0.1	23.7	0.0	0.6	5.7	1.6	0.0	0.0	0.0
5	1.5	0.0	0.0	0.1	27.4	0.0	0.8	7.0	1.8	0.0	0.0	0.0
6	1.4	0.0	0.0	0.1	33.3	0.0	0.9	7.7	1.8	0.0	0.0	0.0
7	0.9	0.0	0.0	0.0	26.7	0.0	0.9	8.2	1.8	0.0	0.0	0.0
8	0.9	0.0	0.0	0.0	23.1	0.0	0.9	8.1	1.8	0.0	0.0	0.0
9	0.9	0.0	0.0	0.1	21.0	0.0	1.1	9.6	1.8	0.0	0.1	0.0
10	0.9	0.0	0.0	0.1	19.8	0.0	1.2	10.6	1.9	0.0	0.1	0.0
11	0.9	0.0	0.0	0.1	19.3	0.0	1.3	11.7	1.9	0.0	0.1	0.0
12	0.9	0.0	0.1	0.1	19.7	0.0	1.4	12.6	2.0	0.0	0.1	0.0
13	0.9	0.0	0.1	0.1	20.8	0.0	1.5	13.4	2.0	0.0	0.1	0.0
14	0.9	0.0	0.1	0.1	22.6	0.0	1.6	14.0	2.1	0.0	0.1	0.0
15	0.9	0.0	0.1	0.1	23.3	0.0	1.7	15.1	2.1	0.0	0.2	0.0
16	0.9	0.0	0.1	0.1	23.6	0.0	1.7	15.6	2.1	0.0	0.2	0.0
17	0.9	0.0	0.1	0.1	24.4	0.0	1.8	16.3	2.1	0.0	0.2	0.0
18	0.9	0.0	0.1	0.1	26.0	0.0	1.8	16.5	2.2	0.0	0.2	0.0
19	0.9	0.0	0.1	0.1	27.1	0.0	1.9	17.2	2.2	0.0	0.2	0.0
20	0.9	0.0	0.1	0.1	28.2	0.0	2.0	17.7	2.2	0.0	0.2	0.0
21	0.9	0.0	0.1	0.1	28.9	0.0	2.1	18.6	2.3	0.0	0.2	0.0
22	0.9	0.0	0.1	0.1	30.4	0.0	2.1	19.0	2.3	0.0	0.2	0.0
23	0.9	0.0	0.1	0.1	31.3	0.0	2.1	19.3	2.3	0.0	0.2	0.0
24	0.9	0.0	0.1	0.1	31.2	0.0	2.2	19.6	2.3	0.0	0.2	0.0
25	0.9	0.0	0.1	0.1	31.9	0.0	2.2	19.9	2.3	0.0	0.2	0.0
26	0.9	0.0	0.1	0.1	33.0	0.0	2.2	20.1	2.4	0.0	0.2	0.0
27	0.9	0.0	0.1	0.1	33.8	0.0	2.3	20.7	2.4	0.0	0.2	0.0
28	0.9	0.0	0.1	0.1	34.3	0.0	2.3	20.8	2.4	0.0	0.2	0.0
29	0.9	0.0	0.1	0.1	36.3	0.0	2.4	21.3	2.4	0.0	0.2	0.0
30	0.9	0.0	0.1	0.1	36.4	0.0	2.5	22.7	2.3	0.0	0.2	0.0
31	0.8	0.0	0.1	0.1	36.7	0.0	2.5	22.5	2.2	0.0	0.3	0.0
32	0.7	0.0	0.1	0.1	37.5	0.0	2.5	22.4	2.0	0.0	0.3	0.0
33	0.5	0.0	0.2	0.1	38.0	0.0	2.5	22.7	1.8	0.0	0.4	0.0
34	0.4	0.0	0.2	0.1	38.0	0.0	2.5	22.7	1.6	0.0	0.4	0.0
35	0.3	0.0	0.2	0.1	38.2	0.0	2.5	22.7	1.5	0.0	0.5	0.0
36	0.3	0.0	0.2	0.1	38.6	0.0	2.5	22.9	1.5	0.0	0.5	0.0
37	0.3	0.0	0.2	0.1	38.7	0.0	2.6	23.2	1.5	0.0	0.5	0.0
38	0.2	0.0	0.2	0.1	39.1	0.0	2.6	23.6	1.5	0.0	0.5	0.0
39	0.2	0.0	0.2	0.1	39.3	0.0	2.6	23.6	1.5	0.0	0.5	0.0
40	0.2	0.0	0.2	0.1	40.0	0.0	2.7	23.9	1.5	0.0	0.5	0.0
41	0.2	0.0	0.2	0.1	40.5	0.0	2.7	24.1	1.5	0.0	0.5	0.0
42	0.2	0.0	0.2	0.1	40.7	0.0	2.7	24.3	1.5	0.0	0.5	0.0
43	0.2	0.0	0.2	0.1	41.5	0.0	2.7	24.3	1.5	0.0	0.5	0.0
44	0.2	0.0	0.2	0.1	42.1	0.0	2.7	24.4	1.5	0.0	0.5	0.0
45	0.2	0.0	0.2	0.1	42.5	0.0	2.8	24.8	1.5	0.0	0.5	0.0
46	0.2	0.0	0.2	0.1	42.6	0.0	2.8	25.0	1.5	0.0	0.5	0.0
47	0.2	0.0	0.2	0.1	43.1	0.0	2.8	25.2	1.5	0.0	0.5	0.0
48	0.2	0.0	0.2	0.1	43.6	0.0	2.8	25.4	1.5	0.0	0.6	0.0
49	0.2	0.0	0.2	0.0	43.8	0.0	2.9	26.0	1.5	0.0	0.6	0.0
50	0.2	0.0	0.2	0.0	44.0	0.0	2.9	25.9	1.5	0.0	0.6	0.0

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2- 9C: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.2	0.0	0.2	0.0	44.2	0.0	2.9	26.3	1.5	0.0	0.6	0.0
52	0.2	0.0	0.2	0.0	44.1	0.0	2.9	26.3	1.5	0.0	0.6	0.0
53	0.2	0.0	0.2	0.0	44.5	0.0	2.9	26.4	1.5	0.0	0.6	0.0
54	0.2	0.0	0.2	0.0	44.8	0.0	2.9	26.4	1.5	0.0	0.6	0.0
55	0.2	0.0	0.2	0.0	44.9	0.0	2.9	26.5	1.5	0.0	0.6	0.0
56	0.2	0.0	0.2	0.0	45.3	0.0	3.0	26.6	1.6	0.0	0.6	0.0
57	0.2	0.0	0.2	0.0	45.4	0.0	3.0	26.7	1.6	0.0	0.6	0.0
58	0.2	0.0	0.2	0.0	45.4	0.0	3.0	27.2	1.6	0.0	0.6	0.0
59	0.1	0.0	0.2	0.0	45.5	0.0	3.0	27.4	1.5	0.0	0.6	0.0
60	0.1	0.0	0.2	0.0	45.5	0.0	3.1	27.5	1.5	0.0	0.6	0.0
61	0.1	0.0	0.2	0.0	45.7	0.0	3.1	27.7	1.6	0.0	0.6	0.0
62	0.1	0.0	0.2	0.0	45.9	0.0	3.1	28.0	1.6	0.0	0.6	0.0
63	0.1	0.0	0.2	0.0	46.0	0.0	3.1	28.0	1.6	0.0	0.6	0.0
64	0.1	0.0	0.2	0.0	45.9	0.0	3.1	28.2	1.5	0.0	0.6	0.0
65	0.1	0.0	0.2	0.0	46.0	0.0	3.2	28.6	1.5	0.0	0.6	0.0
66	0.1	0.0	0.2	0.0	46.3	0.0	3.2	28.7	1.6	0.0	0.6	0.0
67	0.1	0.0	0.2	0.0	46.6	0.0	3.2	28.8	1.6	0.0	0.6	0.0
68	0.1	0.0	0.2	0.0	46.7	0.0	3.2	28.9	1.6	0.0	0.6	0.0
69	0.1	0.0	0.2	0.0	46.7	0.0	3.2	29.1	1.6	0.0	0.6	0.0
70	0.1	0.0	0.2	0.0	46.7	0.0	3.2	29.0	1.6	0.0	0.6	0.0
71	0.1	0.0	0.2	0.0	47.0	0.0	3.2	29.0	1.6	0.0	0.6	0.0
72	0.1	0.0	0.2	0.0	47.1	0.0	3.3	29.2	1.6	0.0	0.6	0.0
73	0.1	0.0	0.2	0.0	47.2	0.0	3.4	29.3	1.6	0.0	0.6	0.0
74	0.1	0.0	0.2	0.0	47.1	0.0	3.4	29.5	1.6	0.0	0.6	0.0
75	0.1	0.0	0.2	0.0	47.1	0.0	3.4	29.6	1.6	0.0	0.6	0.0
76	0.1	0.0	0.2	0.0	47.3	0.0	3.4	30.0	1.6	0.0	0.6	0.0
77	0.1	0.0	0.2	0.0	47.2	0.0	3.4	30.1	1.6	0.0	0.6	0.0
78	0.1	0.0	0.2	0.0	47.1	0.0	3.4	30.4	1.6	0.0	0.6	0.0
79	0.1	0.0	0.2	0.0	47.2	0.0	3.4	30.4	1.6	0.0	0.6	0.0
80	0.1	0.0	0.2	0.0	47.1	0.0	3.4	30.5	1.6	0.0	0.6	0.0
81	0.1	0.0	0.2	0.0	46.9	0.0	3.5	30.6	1.6	0.0	0.6	0.0
82	0.1	0.0	0.2	0.0	46.9	0.0	3.5	30.7	1.6	0.0	0.6	0.0
83	0.1	0.0	0.2	0.0	46.9	0.0	3.5	30.9	1.6	0.0	0.6	0.0
84	0.1	0.0	0.2	0.0	46.9	0.0	3.5	31.1	1.6	0.0	0.6	0.0
85	0.1	0.0	0.2	0.0	46.7	0.0	3.5	31.3	1.6	0.0	0.6	0.0
86	0.1	0.0	0.2	0.0	46.7	0.0	3.5	31.4	1.6	0.0	0.6	0.0
87	0.1	0.0	0.2	0.0	46.7	0.0	3.6	31.5	1.6	0.0	0.6	0.0
88	0.1	0.0	0.2	0.0	46.9	0.0	3.6	31.6	1.6	0.0	0.6	0.0
89	0.1	0.0	0.2	0.0	46.9	0.0	3.6	31.8	1.6	0.0	0.6	0.0
90	0.1	0.0	0.2	0.0	46.7	0.0	3.6	32.0	1.6	0.0	0.6	0.0
91	0.1	0.0	0.2	0.0	46.7	0.0	3.6	32.2	1.6	0.0	0.6	0.0
92	0.1	0.0	0.2	0.0	46.6	0.0	3.6	32.2	1.6	0.0	0.6	0.0
93	0.1	0.0	0.2	0.0	46.7	0.0	3.6	32.2	1.6	0.0	0.6	0.0
94	0.1	0.0	0.2	0.0	46.5	0.0	3.7	32.4	1.6	0.0	0.6	0.0
95	0.1	0.0	0.2	0.0	46.5	0.0	3.7	32.5	1.6	0.0	0.6	0.0
96	0.1	0.0	0.2	0.0	46.4	0.0	3.7	32.6	1.6	0.0	0.6	0.0
97	0.1	0.0	0.2	0.0	46.4	0.0	3.7	32.6	1.5	0.0	0.6	0.0
98	0.1	0.0	0.2	0.0	46.2	0.0	3.7	33.1	1.5	0.0	0.6	0.0
99	0.1	0.0	0.2	0.0	46.4	0.0	3.7	33.0	1.6	0.0	0.6	0.0
100	0.1	0.0	0.2	0.0	46.4	0.0	3.8	33.2	1.6	0.0	0.6	0.0

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2-10A: ALLOCATION OF CLAIMS COSTS BY TYPE AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	111.1	0.0	0.0	0.0	2.4	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.5	0.0	0.0	0.0
3	966.1	0.0	10.9	0.0	10.2	0.0	0.0	0.0	18.3	0.0	0.0	0.0	3.6	0.0	0.0	0.1
4	677.4	0.0	0.0	0.0	10.2	0.0	0.0	0.0	24.0	0.0	0.0	0.0	5.9	0.0	0.0	0.4
5	1162.7	0.0	0.0	0.0	11.3	0.0	0.0	0.0	25.9	0.0	0.0	0.0	5.9	0.0	0.0	0.3
6	941.4	0.0	0.0	0.0	6.2	0.0	0.0	0.0	22.6	0.0	0.0	0.0	5.7	0.0	0.0	0.3
7	245.0	0.0	0.0	0.0	7.1	0.0	0.4	0.0	8.2	0.0	0.0	0.0	3.7	0.0	0.0	0.3
8	80.1	0.0	0.0	0.0	1.8	0.0	0.0	0.0	5.6	0.0	0.0	0.0	0.8	0.0	0.0	0.1
9	122.1	0.0	0.0	0.0	3.1	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.8	0.0	0.0	0.0
10	212.4	0.0	0.0	0.0	3.2	0.0	0.0	0.0	3.9	0.0	0.0	0.0	1.0	0.0	0.0	0.0
11	118.9	0.0	0.0	0.0	0.5	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.6	0.0	0.0	0.0
12	117.7	0.0	0.0	0.0	1.5	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.8	0.0	0.0	0.0
13	96.4	0.0	0.0	0.0	2.1	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.7	0.0	0.0	0.1
14	99.1	0.0	0.0	0.0	4.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.7	0.0	0.0	0.0
15	137.5	0.0	0.0	0.0	1.2	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.5	0.0	0.0	0.0
16	110.3	0.0	0.0	0.0	2.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.7	0.0	0.0	0.0
17	55.9	0.0	0.0	0.0	1.7	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.5	0.0	0.0	0.1
18	208.4	0.0	0.0	0.0	1.1	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0
19	73.8	0.0	0.0	0.0	1.3	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.8	0.0	0.0	0.0
20	160.3	0.0	0.0	0.0	1.3	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.4	0.0	0.0	0.1
21	134.8	0.0	0.0	0.0	2.5	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.4	0.0	0.0	0.0
22	132.5	0.0	0.0	0.0	0.6	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.4	0.0	0.0	0.0
23	34.5	0.0	0.0	0.0	3.3	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0
24	121.6	0.0	0.0	0.0	1.7	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.4	0.0	0.0	0.0
25	141.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.4	0.0	0.0	0.0
26	19.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.2	0.0	0.0	0.0
27	30.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0
28	67.1	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.3	0.0	0.0	0.0
29	83.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.3	0.0	0.0	0.0
30	114.6	0.0	0.0	0.0	1.5	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
31	244.8	0.0	0.0	0.0	0.4	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0
32	12.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0
33	59.1	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.3	0.0	0.0	0.0
34	4.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0
35	24.6	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.2	0.0	0.0	0.0
36	35.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	25.6	0.0	0.0	0.0	2.1	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.3	0.0	0.0	0.0
39	102.1	0.0	0.0	0.0	2.7	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
41	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	28.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
45	33.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
48	17.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2-10A: ALLOCATION OF CLAIMS COSTS BY TYPE AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	1.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	58.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	60.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	5.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
74	40.7	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2-10B: ALLOCATION OF CLAIMS COSTS BY TYPE AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	20.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	25.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	58.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	1.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0
27	0.0	11.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0
28	0.0	12.4	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	24.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	8.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	27.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
33	0.0	1.7	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0
34	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	25.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
41	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	36.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0
45	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
46	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.1	0.0	0.0
47	0.0	36.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	13.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.0
49	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	23.5	0.0	0.0	0.0	1.2	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.1	0.0	0.0

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2-10B: ALLOCATION OF CLAIMS COSTS BY TYPE AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.0	6.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
52	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0
53	0.0	91.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	8.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0
56	0.0	0.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	20.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0
58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	0.0	36.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0
62	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
63	0.0	38.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0
64	0.0	5.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
66	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0
67	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0
68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.0	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0
71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	0.0	102.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
74	0.0	11.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0
75	0.0	36.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	12.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
79	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
81	0.0	56.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	57.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	61.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
91	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	0.0	23.2	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0
93	0.0	85.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
99	0.0	1.9	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2-10C: ALLOCATION OF CLAIMS COSTS BY TYPE AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	58.3	0.0	0.0	0.0	1.6	0.0	0.0	0.0	2.0	0.0	0.3	0.0	0.7	0.0	0.0	0.2
2	91.6	0.0	34.0	0.0	1.2	0.0	0.0	0.0	3.2	0.0	0.3	0.0	0.6	0.0	0.0	0.0
3	244.9	0.0	0.0	0.0	6.3	0.0	0.0	0.0	9.5	0.0	0.0	0.0	1.8	0.0	0.0	0.4
4	387.5	0.0	0.0	0.0	10.5	0.0	0.0	0.0	9.3	0.0	0.0	0.0	2.2	0.0	0.0	0.3
5	432.6	0.0	0.0	0.0	2.0	0.0	0.0	0.0	12.6	0.0	0.0	0.0	1.8	0.0	0.0	0.2
6	233.8	0.0	0.0	0.0	6.2	0.0	0.0	0.0	7.4	0.0	0.0	0.0	1.4	0.0	0.0	0.2
7	54.8	0.0	0.0	0.0	1.9	0.0	0.1	0.0	3.3	0.0	0.0	0.0	1.4	0.0	0.0	0.2
8	1.4	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.2	0.0	0.0	0.0
9	167.6	0.0	0.0	0.0	0.5	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.2	0.0	0.0	0.1
10	175.2	0.0	0.0	0.0	4.3	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.5	0.0	0.0	0.0
11	225.9	0.0	0.0	0.0	0.5	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.6	0.0	0.0	0.3
12	67.9	0.0	0.0	0.0	1.1	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.4	0.0	0.0	0.2
13	75.3	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.4	0.0	0.0	0.2
14	25.8	0.0	0.0	0.0	0.8	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.4	0.0	0.0	0.1
15	161.5	0.0	3.3	0.0	0.7	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.4	0.0	0.0	0.3
16	87.5	0.0	0.0	0.0	4.9	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.4	0.0	0.0	0.2
17	211.3	0.0	0.0	0.0	1.6	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.4	0.0	0.0	0.2
18	71.6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.4	0.0	0.0	0.3
19	143.4	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.4	0.0	0.0	0.2
20	209.7	0.0	0.0	0.0	1.2	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.6	0.0	0.0	0.1
21	206.9	0.0	0.0	0.0	0.7	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.4	0.0	0.0	0.2
22	71.5	0.0	0.0	0.0	2.2	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.4	0.0	0.0	0.4
23	25.1	0.0	0.0	0.0	0.7	0.0	0.1	0.0	3.1	0.0	0.3	0.0	0.3	0.0	0.0	0.2
24	58.6	0.0	0.0	0.0	0.3	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.4	0.0	0.0	0.2
25	159.8	0.0	0.0	0.0	1.5	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.4	0.0	0.0	0.3
26	52.3	0.0	0.0	0.0	3.5	0.0	0.1	0.0	1.1	0.0	0.3	0.0	0.4	0.0	0.0	0.2
27	113.8	0.0	0.0	0.0	0.7	0.0	0.0	0.0	2.1	0.0	0.3	0.0	0.3	0.0	0.0	0.2
28	70.3	0.0	0.0	0.0	4.7	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.3	0.0	0.0	0.3
29	118.5	0.0	0.0	0.0	2.6	0.0	0.0	0.0	4.3	0.0	0.3	0.0	0.4	0.0	0.0	0.3
30	90.2	0.0	0.0	0.0	3.8	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.3	0.0	0.0	0.3
31	16.0	0.0	26.0	0.0	0.7	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.1
32	29.6	0.0	0.0	0.0	0.7	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.4	0.0	0.0	0.2
33	2.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.2	0.0	0.0	0.2
34	38.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.2	0.0	0.0	0.1
35	27.6	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.2
36	12.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
37	66.3	0.0	0.0	0.0	0.7	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
38	20.9	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0	0.1
39	21.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
40	0.4	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
41	4.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
43	14.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
44	130.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
46	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
47	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.1
48	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.1	0.0	0.0	0.1
49	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
50	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2-10C: ALLOCATION OF CLAIMS COSTS BY TYPE AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	30.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.3	0.0	0.0	0.0	0.0	0.1
52	26.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	18.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	41.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
59	21.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	83.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	109.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.1	0.0	0.4	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0
66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	4.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74	16.7	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.1
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0
81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87	31.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	2.5	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	18.7	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2-11: SUMMARY OF FACILITY/FIRM BANKRUPTCY STATUS BY YEAR AND BY NET WORTH FOR NON-GOVERNMENT OWNED FACILITIES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	FIRM NET WORTH IN 1982 DOLLARS											
	LESS THAN 10 MILLION			10 TO 100 MILLION			100 TO 1000 MILLION			GREATER THAN 1000 MILLION		
	SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES	
YEAR	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)
1	243.9	11.69	(4.80)	109.8	0.10	(0.09)	223.8	0.48	(0.22)	341.2	0.59	(0.17)
2	232.2	2.72	(1.16)	109.7	0.34	(0.32)	223.3	0.38	(0.17)	340.6	0.69	(0.20)
3	229.5	9.79	(4.26)	109.4	0.52	(0.47)	222.9	0.66	(0.30)	339.9	0.90	(0.27)
4	219.7	26.69	(12.14)	108.9	1.24	(1.14)	222.2	0.72	(0.32)	339.0	0.55	(0.17)
5	193.0	24.66	(12.81)	107.6	1.31	(1.23)	221.5	0.59	(0.26)	338.4	1.03	(0.29)
6	168.3	19.86	(11.82)	106.3	1.62	(1.53)	220.9	1.34	(0.59)	337.4	1.55	(0.47)
7	148.5	16.59	(11.19)	104.7	1.10	(1.09)	219.6	0.76	(0.34)	335.9	0.72	(0.22)
8	131.9	10.28	(7.88)	103.6	0.93	(0.90)	218.8	0.72	(0.33)	335.1	1.00	(0.29)
9	121.6	7.03	(5.80)	102.7	0.59	(0.57)	218.1	0.86	(0.40)	334.1	1.24	(0.38)
10	114.6	6.10	(5.41)	102.1	0.48	(0.49)	217.2	0.38	(0.17)	332.9	0.55	(0.17)
11	108.5	5.28	(4.89)	101.6	0.66	(0.68)	216.9	1.00	(0.45)	332.3	0.76	(0.23)
12	103.2	4.55	(4.49)	100.9	0.97	(0.96)	215.9	0.79	(0.37)	331.6	0.38	(0.11)
13	98.7	4.97	(4.94)	100.0	0.55	(0.55)	215.1	0.62	(0.28)	331.2	0.86	(0.26)
14	93.7	4.97	(5.35)	99.4	0.69	(0.70)	214.4	1.45	(0.66)	330.3	1.86	(0.56)
15	88.7	3.34	(3.78)	98.7	0.62	(0.64)	213.0	0.79	(0.37)	328.5	1.07	(0.33)
16	85.4	3.69	(4.30)	98.1	0.52	(0.52)	212.2	0.52	(0.24)	327.4	0.69	(0.21)
17	81.7	3.00	(3.66)	97.6	0.76	(0.78)	211.7	0.86	(0.41)	326.7	0.90	(0.27)
18	78.7	2.62	(3.36)	96.8	0.76	(0.79)	210.8	0.55	(0.26)	325.8	0.52	(0.17)
19	76.1	3.10	(4.10)	96.1	0.86	(0.90)	210.3	0.55	(0.26)	325.3	1.52	(0.47)
20	73.0	2.45	(3.45)	95.2	0.76	(0.79)	209.7	0.79	(0.38)	323.8	1.86	(0.57)
21	70.5	2.31	(3.28)	94.4	0.79	(0.83)	208.9	0.90	(0.43)	321.9	0.79	(0.24)
22	68.2	2.28	(3.31)	93.7	0.83	(0.88)	208.1	0.55	(0.26)	321.1	0.83	(0.26)
23	66.0	2.45	(3.71)	92.8	0.62	(0.65)	207.5	0.41	(0.20)	320.3	0.52	(0.16)
24	63.6	1.86	(3.00)	92.2	0.52	(0.56)	207.1	0.41	(0.20)	319.8	0.62	(0.20)
25	61.7	1.41	(2.35)	91.7	0.79	(0.84)	206.8	0.45	(0.22)	319.2	0.59	(0.19)
26	60.3	1.55	(2.50)	90.9	0.76	(0.81)	206.3	0.45	(0.22)	318.7	0.45	(0.14)
27	58.8	1.17	(2.01)	90.1	0.76	(0.84)	205.9	0.52	(0.25)	318.3	0.90	(0.28)
28	57.6	1.28	(2.25)	89.4	0.59	(0.66)	205.4	0.69	(0.33)	317.4	0.83	(0.25)
29	56.3	1.07	(1.89)	88.8	0.55	(0.62)	204.7	0.79	(0.39)	316.8	0.45	(0.14)
30	55.2	1.38	(2.52)	88.3	0.72	(0.79)	204.1	0.90	(0.44)	316.4	0.83	(0.26)
31	53.9	1.48	(2.86)	87.7	0.76	(0.89)	203.4	0.66	(0.32)	315.8	1.03	(0.32)
32	52.5	0.76	(1.43)	87.0	0.59	(0.66)	203.0	0.21	(0.10)	315.0	0.93	(0.30)
33	51.8	1.48	(2.96)	86.4	0.45	(0.53)	203.1	0.28	(0.14)	314.3	0.62	(0.19)
34	50.4	1.07	(2.16)	86.1	0.45	(0.52)	203.0	0.28	(0.13)	314.0	0.41	(0.13)
35	49.3	1.07	(2.11)	85.8	0.66	(0.76)	202.9	0.38	(0.18)	313.9	0.41	(0.14)
36	48.3	0.86	(1.81)	85.1	0.38	(0.43)	202.9	0.52	(0.25)	313.7	0.38	(0.12)
37	47.5	0.72	(1.58)	85.0	0.34	(0.40)	202.8	0.45	(0.22)	314.0	0.90	(0.29)
38	46.8	0.90	(1.97)	84.8	0.55	(0.64)	202.6	0.45	(0.22)	313.4	0.21	(0.07)
39	45.9	0.55	(1.18)	84.4	0.52	(0.62)	202.4	0.59	(0.29)	313.5	0.24	(0.08)
40	45.4	0.69	(1.65)	84.0	0.41	(0.45)	202.1	0.62	(0.31)	313.5	0.55	(0.17)
41	44.8	0.59	(1.30)	83.8	0.62	(0.76)	201.8	0.52	(0.26)	313.2	0.72	(0.23)
42	44.2	1.07	(2.46)	83.3	0.28	(0.33)	201.4	0.69	(0.35)	313.0	1.55	(0.48)
43	43.2	0.52	(1.17)	83.1	0.55	(0.66)	201.0	0.34	(0.17)	311.8	0.59	(0.18)
44	42.8	0.52	(1.27)	82.7	0.59	(0.71)	201.1	0.69	(0.35)	311.9	0.38	(0.12)
45	42.4	0.41	(1.07)	82.3	0.28	(0.32)	200.7	0.52	(0.26)	312.2	0.52	(0.17)
46	42.0	0.62	(1.43)	82.1	0.41	(0.53)	200.6	0.38	(0.19)	312.4	1.07	(0.34)
47	41.5	0.14	(0.37)	81.8	0.28	(0.35)	200.4	0.31	(0.15)	311.7	0.31	(0.10)
48	41.4	0.66	(1.64)	81.6	0.34	(0.43)	200.3	0.66	(0.33)	311.9	0.17	(0.05)
49	40.8	0.62	(1.56)	81.4	0.34	(0.43)	199.7	0.76	(0.38)	312.0	0.52	(0.17)
50	40.1	0.21	(0.59)	81.1	0.45	(0.54)	199.3	0.41	(0.20)	312.0	1.10	(0.37)

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES
(CONTINUED)
TABLE 2-11: SUMMARY OF FACILITY/FIRM BANKRUPTCY STATUS BY YEAR AND BY NET WORTH FOR NON-GOVERNMENT OWNED FACILITIES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	FIRM NET WORTH IN 1982 DOLLARS											
	LESS THAN 10 MILLION			10 TO 100 MILLION			100 TO 1000 MILLION			GREATER THAN 1000 MILLION		
	SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES	
YEAR	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)
51	39.9	0.38	(0.96)	80.8	0.34	(0.43)	199.0	0.52	(0.26)	311.2	1.10	(0.35)
52	39.7	0.41	(0.93)	80.7	0.41	(0.51)	198.8	0.90	(0.45)	310.5	0.66	(0.21)
53	39.3	0.45	(1.24)	80.7	0.31	(0.38)	198.3	0.34	(0.18)	310.7	0.97	(0.31)
54	39.0	0.55	(1.45)	80.7	0.38	(0.49)	198.5	0.59	(0.29)	310.8	0.48	(0.16)
55	38.6	0.31	(0.79)	80.4	0.24	(0.30)	198.8	0.34	(0.17)	310.9	0.45	(0.14)
56	38.4	0.31	(0.85)	80.6	0.59	(0.74)	199.0	0.52	(0.26)	311.5	0.24	(0.08)
57	38.2	0.66	(1.76)	80.4	0.66	(0.82)	199.1	0.34	(0.18)	311.9	0.48	(0.15)
58	37.7	0.66	(1.62)	79.9	0.38	(0.49)	199.3	0.69	(0.34)	312.7	0.41	(0.14)
59	37.1	0.38	(1.08)	79.9	0.52	(0.67)	199.2	0.41	(0.21)	313.0	0.90	(0.30)
60	36.9	0.38	(1.09)	79.5	0.62	(0.75)	199.2	0.28	(0.14)	312.9	0.62	(0.20)
61	36.7	0.28	(0.77)	79.1	0.38	(0.48)	199.6	0.34	(0.18)	312.6	0.38	(0.12)
62	36.6	0.41	(1.09)	78.8	0.48	(0.64)	199.4	0.28	(0.14)	313.1	0.34	(0.11)
63	36.2	0.34	(0.91)	78.5	0.31	(0.39)	199.7	0.38	(0.19)	313.4	0.76	(0.24)
64	35.9	0.24	(0.66)	78.3	0.14	(0.18)	199.9	0.83	(0.42)	313.2	0.45	(0.14)
65	35.8	0.28	(0.77)	78.4	0.45	(0.60)	199.7	0.24	(0.12)	313.5	0.41	(0.13)
66	35.7	0.31	(0.81)	78.2	0.28	(0.34)	199.8	0.62	(0.31)	313.6	0.59	(0.17)
67	35.4	0.21	(0.61)	78.2	0.21	(0.27)	199.6	0.41	(0.21)	313.5	0.34	(0.11)
68	35.2	0.24	(0.74)	78.1	0.69	(0.88)	199.3	0.41	(0.21)	314.1	1.14	(0.34)
69	35.0	0.24	(0.67)	77.4	0.31	(0.39)	199.5	0.55	(0.28)	313.7	0.90	(0.28)
70	34.9	0.24	(0.80)	77.4	0.28	(0.34)	199.6	0.34	(0.18)	313.4	0.45	(0.14)
71	34.7	0.10	(0.30)	77.4	0.31	(0.42)	199.6	0.28	(0.14)	313.8	0.52	(0.17)
72	34.7	0.31	(0.85)	77.3	0.17	(0.24)	199.7	0.59	(0.28)	313.9	0.41	(0.14)
73	34.4	0.21	(0.62)	77.4	0.45	(0.57)	199.4	0.31	(0.16)	314.2	0.62	(0.20)
74	34.3	0.14	(0.41)	77.1	0.28	(0.38)	199.5	0.76	(0.36)	314.2	0.79	(0.24)
75	34.2	0.17	(0.56)	76.9	0.31	(0.39)	198.9	0.86	(0.44)	313.9	0.86	(0.28)
76	34.2	0.03	(0.08)	76.7	0.28	(0.36)	198.4	0.45	(0.23)	313.5	0.38	(0.13)
77	34.3	0.03	(0.16)	76.6	0.31	(0.41)	198.2	0.41	(0.22)	313.7	0.45	(0.15)
78	34.3	0.17	(0.45)	76.4	0.59	(0.80)	198.1	0.48	(0.24)	313.8	0.34	(0.11)
79	34.2	0.17	(0.54)	75.9	0.34	(0.45)	197.9	0.41	(0.21)	314.0	0.38	(0.12)
80	34.1	0.24	(0.82)	75.7	0.38	(0.51)	197.9	0.69	(0.33)	314.2	0.59	(0.20)
81	33.9	0.24	(0.82)	75.6	0.28	(0.39)	197.5	0.48	(0.24)	314.0	0.38	(0.12)
82	33.7	0.38	(1.15)	75.6	0.21	(0.28)	197.4	0.38	(0.19)	314.1	0.28	(0.09)
83	33.5	0.21	(0.66)	75.4	0.24	(0.32)	197.4	0.24	(0.12)	314.3	0.24	(0.08)
84	33.3	0.24	(0.71)	75.2	0.24	(0.30)	197.4	0.48	(0.24)	314.5	0.41	(0.13)
85	33.1	0.38	(1.05)	75.1	0.17	(0.25)	197.3	0.34	(0.18)	314.7	0.69	(0.23)
86	32.7	0.28	(0.94)	75.0	0.31	(0.45)	197.4	0.28	(0.13)	314.4	0.66	(0.21)
87	32.5	0.0	(0.0)	74.8	0.28	(0.39)	197.6	0.21	(0.11)	314.3	0.72	(0.23)
88	32.6	0.17	(0.52)	74.7	0.38	(0.49)	197.4	0.59	(0.30)	314.3	0.83	(0.27)
89	32.4	0.07	(0.19)	74.5	0.17	(0.24)	197.2	0.28	(0.14)	313.9	1.48	(0.47)
90	32.3	0.07	(0.32)	74.5	0.59	(0.79)	197.1	0.79	(0.40)	313.1	1.14	(0.35)
91	32.3	0.10	(0.36)	74.0	0.66	(0.88)	196.6	0.69	(0.36)	312.4	0.62	(0.20)
92	32.2	0.21	(0.65)	73.6	0.28	(0.38)	196.3	0.21	(0.11)	312.3	0.66	(0.21)
93	32.1	0.21	(0.66)	73.4	0.34	(0.45)	196.4	0.38	(0.19)	312.2	0.17	(0.06)
94	32.0	0.07	(0.23)	73.1	0.17	(0.23)	196.5	0.38	(0.19)	312.4	0.83	(0.27)
95	31.9	0.10	(0.37)	73.1	0.38	(0.54)	196.4	0.48	(0.25)	312.2	0.21	(0.07)
96	31.9	0.14	(0.51)	72.8	0.24	(0.34)	196.2	0.38	(0.19)	312.5	0.86	(0.28)
97	31.8	0.03	(0.09)	72.8	0.28	(0.42)	196.2	0.62	(0.31)	312.0	0.34	(0.11)
98	31.9	0.14	(0.40)	72.6	0.28	(0.43)	196.0	0.41	(0.21)	312.0	0.93	(0.30)
99	31.8	0.21	(0.72)	72.4	0.34	(0.43)	195.9	0.28	(0.15)	311.6	0.59	(0.19)
100	31.7	0.21	(0.63)	72.2	0.24	(0.32)	195.8	0.31	(0.15)	311.4	0.72	(0.24)

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2-12: AVERAGE OCCURRENCE OF RELEASES FOLLOWING YEAR FACILITY OPENS
VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

DETECTION OF RELEASES AT EXISTING FACILITIES:

RELEASE TYPE	WITHIN 50 YEARS AFTER OPENING: PROPORTION WITH RELEASE MEAN (STD.ERR)	WITHIN 50 YEARS AFTER OPENING: YEARS AFTER OPENING MEAN (STD.ERR)	WITHIN 75 YEARS AFTER OPENING: PROPORTION WITH RELEASE MEAN (STD.ERR)	WITHIN 75 YEARS AFTER OPENING: YEARS AFTER OPENING MEAN (STD.ERR)
INDICATING PARAMETERS ON-SITE:	0.45 (0.00)	4.7 (0.1)	0.47 (0.00)	6.6 (0.1)
DETECTABLE CONC. ON-SITE :	0.41 (0.00)	7.4 (0.1)	0.44 (0.00)	9.8 (0.1)
TOXIC CONC. ON-SITE :	0.31 (0.00)	7.5 (0.1)	0.34 (0.00)	10.1 (0.1)
TASTE/ODOR OFF-SITE :	0.08 (0.00)	24.9 (0.3)	0.10 (0.00)	30.1 (0.3)
DETECTABLE CONC. OFF-SITE :	0.15 (0.00)	23.0 (0.2)	0.18 (0.00)	27.3 (0.2)
TOXIC CONC. OFF-SITE :	0.12 (0.00)	22.4 (0.2)	0.14 (0.00)	26.5 (0.3)
BATHTUB EFFECT :	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)

DETECTION OF RELEASES AT NEW FACILITIES:

RELEASE TYPE	WITHIN 50 YEARS AFTER OPENING: PROPORTION WITH RELEASE MEAN (STD.ERR)	WITHIN 50 YEARS AFTER OPENING: YEARS AFTER OPENING MEAN (STD.ERR)	WITHIN 75 YEARS AFTER OPENING: PROPORTION WITH RELEASE MEAN (STD.ERR)	WITHIN 75 YEARS AFTER OPENING: YEARS AFTER OPENING MEAN (STD.ERR)
INDICATING PARAMETERS ON-SITE:	0.03 (0.01)	38.6 (2.9)	0.0 (0.0)	0.0 (0.0)
DETECTABLE CONC. ON-SITE :	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
TOXIC CONC. ON-SITE :	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
TASTE/ODOR OFF-SITE :	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
DETECTABLE CONC. OFF-SITE :	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
TOXIC CONC. OFF-SITE :	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
BATHTUB EFFECT :	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)

CURRENT PCLTF STATUTE WITH PARTIAL BANNING OF LAND DISPOSAL OF WASTES

TABLE 2-13A: CAPITAL AND O&M COSTS: (THOUSANDS OF 1982 DOLLARS)
STATISTICS ARE FOR OBSERVATIONS GENERATED FOR 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

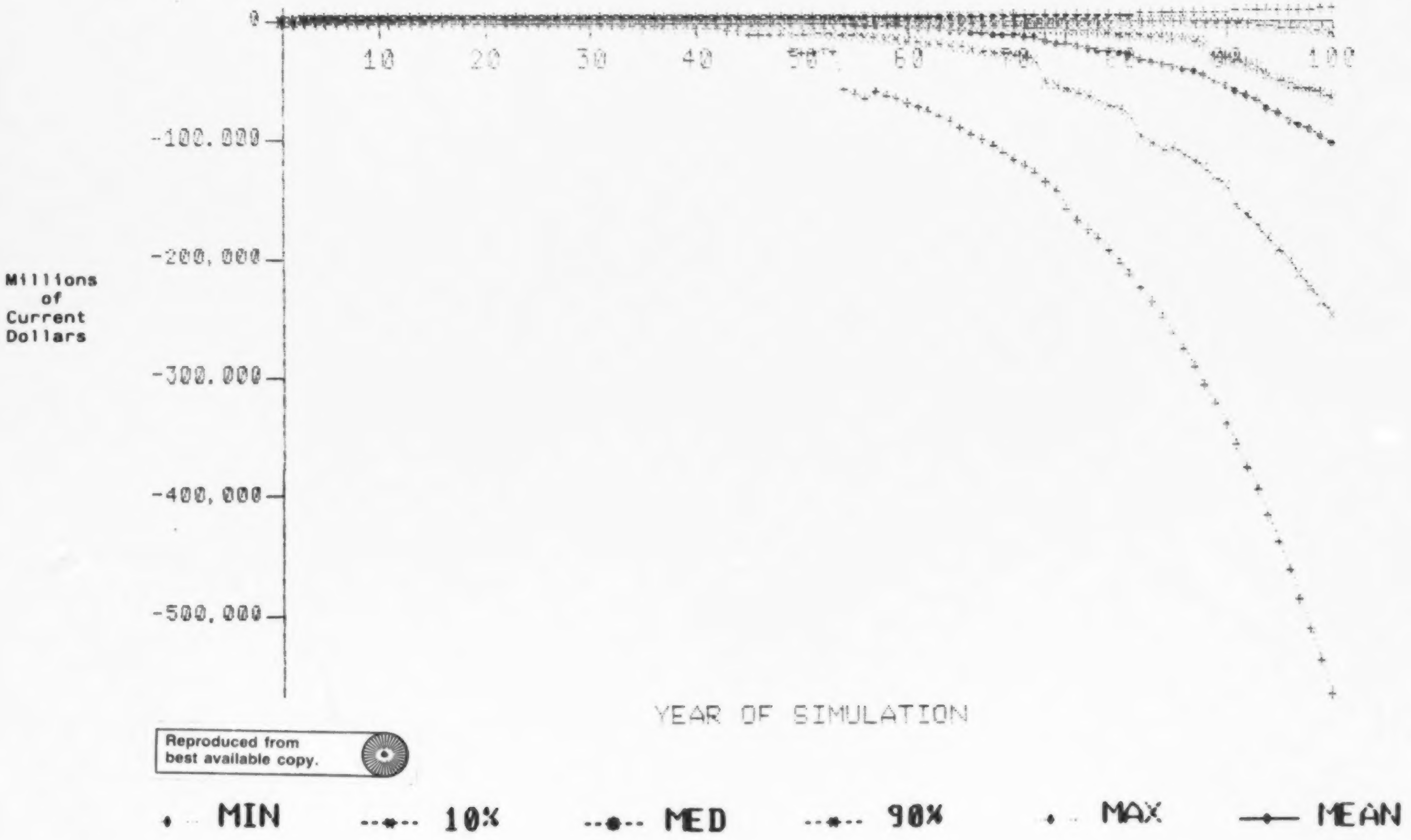
ACTION		OBSERVATIONS	MINIMUM	MEAN	MAXIMUM	FRACTION OF TIMES UNABLE TO ALLOCATE COST
MONITORING:						
INDICATING PARAMETERS ON-SITE	K:	0	0.0	0.0	0.0	
	O&M:	32412	2.7	4.7	6.5	0.1860
CONSTITUENTS ON-SITE	K:	0	0.0	0.0	0.0	
	O&M:	17486	3.4	5.6	8.3	0.3448
PLUME DELIN. & TRACKING ON-SITE	K:	0	0.0	0.0	0.0	
	O&M:	0	0.0	0.0	0.0	0.0
CONSTITUENTS OFF-SITE	K:	12514	25.0	37.5	50.0	
	O&M:	12925	1.8	2.4	3.0	0.0
PLUME DELIN. & TRACKING OFF-SITE	K:	0	0.0	0.0	0.0	
	O&M:	0	0.0	0.0	0.0	0.0
RESPONSE:						
SURFACE SEALING	K:	12604	6.5	277.0	18062.3	
	O&M:	0	0.0	0.0	0.0	0.0
FLUID REMOVAL & TREATMT ON-SITE	K:	12604	41.3	137.3	3837.1	
	O&M:	12604	33.0	122.4	5046.8	0.0
FLUID REMOVAL & TREATMT OFF-SITE	K:	4793	0.0	248.9	3687.2	
	O&M:	4824	0.0	255.8	4872.6	0.0
ROUTINE CARE:						
POST-CLOSURE CARE	K:	0	0.0	0.0	0.0	
	O&M:	24212	0.5	7.6	124.8	0.3838

TABLE 2-13B: GENERATED CLAIMS (THOUSANDS OF 1982 DOLLARS)
STATISTICS ARE FOR OBSERVATIONS GENERATED FOR 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

CLAIMS:	OBSERVATIONS	MINIMUM	MEAN	MAXIMUM	FRACTION OF GENERATED CLIAMS NOT LEGALLY VALID	FRACTION OF VALID CLAIMS NOT COMPENSATED
PERSONAL INJURY:	2160	4.0	279228.6	10579005.0	0.1797	0.2159
REAL PROPERTY:	5349	0.1	1530.2	152721.5	0.2519	0.1433
ECONOMIC LOSS:	2864	60.0	5846.3	45265.0	0.2678	0.1950
NATURAL RESOURCE DAMAGE:	3686	606.7	606.5	606.7	0.0	0.0

GRAPH 3-1

UNOBLIGATED FUND BALANCE IN MILLIONS OF CURRENT DOLLARS
FOR SIMULATION 3:
COVERAGE OF NON-ROUTINE MONITORING AND RESPONSE
COSTS DURING THE POST-CLOSURE PERIOD



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COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3- 1: SUMMARY OF FACILITY POPULATION BY YEAR, PERMIT STATUS, AND QUALIFICATION STATUS
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	OPERATING FACILITIES		CLOSED FACILITIES						
			PERMITTED			NON-PERMITTED			DECONTAMINATED
YEAR	EXISTING	NEW	QUALIFICATION STATUS PENDING	QUALIFIED	UNQUALIFIED	QUALIFICATION STATUS PENDING	QUALIFIED	UNQUALIFIED	
1	938	0	1	0	0	0	0	37	7
2	853	0	6	0	0	0	0	105	18
3	774	0	17	0	0	0	0	162	30
4	687	0	41	0	0	0	0	212	43
5	606	0	67	0	0	0	0	253	55
6	574	3	93	1	0	0	0	253	61
7	547	9	109	3	3	0	0	253	66
8	525	17	116	7	10	0	0	253	70
9	505	25	109	15	26	0	0	253	74
10	487	32	98	24	44	0	0	253	77
11	468	39	87	32	61	0	0	253	81
12	449	45	80	41	75	0	0	253	85
13	433	52	76	49	85	0	0	253	88
14	417	59	73	56	94	0	0	253	90
15	400	63	72	64	101	0	0	253	93
16	386	69	69	71	109	0	0	253	96
17	372	74	65	78	118	0	0	253	98
18	360	77	62	85	125	0	0	253	100
19	347	81	59	90	132	0	0	253	103
20	334	84	56	97	140	0	0	253	105
21	323	87	54	103	146	0	0	253	106
22	312	90	52	108	153	0	0	253	109
23	302	92	49	113	159	0	0	253	110
24	290	95	48	118	164	0	0	253	112
25	281	97	46	123	170	0	0	253	114
26	272	98	43	127	176	0	0	253	116
27	262	100	42	131	181	0	0	253	118
28	252	101	43	135	186	0	0	253	119
29	244	102	41	140	191	0	0	253	120
30	235	103	41	143	195	0	0	253	122
31	227	104	41	147	199	0	0	253	124
32	219	105	39	150	204	0	0	253	125
33	211	106	38	154	209	0	0	253	126
34	204	106	37	158	214	0	0	253	128
35	197	106	36	161	218	0	0	253	130
36	190	106	35	165	222	0	0	253	131
37	185	106	35	168	226	0	0	253	132
38	179	105	33	171	230	0	0	253	133
39	174	105	32	174	234	0	0	253	134
40	168	104	30	178	238	0	0	253	135
41	163	104	29	181	241	0	0	253	137
42	157	102	30	185	243	0	0	253	138
43	152	102	30	188	246	0	0	253	139
44	146	102	30	191	249	0	0	253	140
45	141	101	30	194	252	0	0	253	141
46	138	100	30	197	254	0	0	253	142
47	133	98	28	201	258	0	0	253	143
48	130	98	27	204	260	0	0	253	144
49	125	97	27	207	263	0	0	253	145
50	122	96	26	211	265	0	0	253	146

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD
(CONTINUED)
TABLE 3- 1: SUMMARY OF FACILITY POPULATION BY YEAR, PERMIT STATUS, AND QUALIFICATION STATUS
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	OPERATING FACILITIES		CLOSED FACILITIES						
			PERMITTED			NON-PERMITTED			DECONTAMINATED
YEAR	EXISTING	NEW	QUALIFICATION STATUS PENDING	QUALIFIED	UNQUALIFIED	QUALIFICATION STATUS PENDING	QUALIFIED	UNQUALIFIED	
51	118	96	25	214	267	0	0	253	147
52	114	97	24	217	269	0	0	253	148
53	111	98	24	220	271	0	0	253	149
54	108	99	24	223	274	0	0	253	149
55	104	99	24	226	276	0	0	253	150
56	101	101	25	229	277	0	0	253	151
57	98	102	24	231	280	0	0	253	152
58	96	103	23	234	281	0	0	253	152
59	93	104	23	237	283	0	0	253	153
60	91	105	22	241	285	0	0	253	154
61	88	105	22	244	287	0	0	253	154
62	86	106	21	247	288	0	0	253	155
63	83	106	22	249	290	0	0	253	155
64	81	107	21	252	291	0	0	253	156
65	79	108	21	255	293	0	0	253	156
66	77	108	20	258	295	0	0	253	157
67	75	109	19	260	296	0	0	253	157
68	72	109	18	263	298	0	0	253	158
69	70	109	19	265	299	0	0	253	159
70	68	110	19	267	301	0	0	253	159
71	66	109	19	270	302	0	0	253	160
72	64	111	19	272	303	0	0	253	160
73	63	111	18	274	305	0	0	253	160
74	62	110	17	277	306	0	0	253	161
75	60	110	17	279	308	0	0	253	161
76	59	111	14	282	310	0	0	253	162
77	57	110	15	284	311	0	0	253	162
78	56	111	15	286	312	0	0	253	163
79	54	111	14	287	313	0	0	253	163
80	53	111	14	289	314	0	0	253	163
81	52	111	15	291	315	0	0	253	164
82	51	110	14	294	316	0	0	253	164
83	49	110	14	295	316	0	0	253	165
84	48	110	15	297	317	0	0	253	165
85	47	110	15	299	318	0	0	253	166
86	46	109	15	301	319	0	0	253	166
87	45	109	15	303	320	0	0	253	166
88	44	109	15	305	321	0	0	253	167
89	43	108	15	307	323	0	0	253	167
90	42	108	14	308	324	0	0	253	168
91	41	108	14	311	324	0	0	253	168
92	40	107	13	313	325	0	0	253	169
93	39	107	13	315	326	0	0	253	169
94	38	106	14	317	327	0	0	253	170
95	37	106	15	319	328	0	0	253	170
96	36	106	15	320	329	0	0	253	170
97	35	106	15	323	329	0	0	253	170
98	34	105	15	324	330	0	0	253	171
99	33	104	15	327	331	0	0	253	171
100	32	104	14	329	332	0	0	253	171

TABLE 3- 2: SUMMARY PCLTF FINANCIAL STATISTICS
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	UNOBLIGATED BALANCE	BALANCE	NON-INTEREST EXPENDITURES	INTEREST PAYMENTS	TAX REVENUE	INTEREST REVENUE
1	0.0	0.0	0.0	0.0	37.56	1.12
2	38.69	38.69	0.0	0.0	36.62	4.70
3	80.01	80.01	0.0	0.0	35.89	9.33
4	125.23	125.23	0.0	0.0	35.17	12.72
5	173.12	173.12	0.0	0.0	34.47	15.48
6	223.07	223.07	0.0	0.0	8.57	17.09
7	248.73	248.73	0.0	0.0	0.0	16.35
8	265.09	265.09	0.0	0.0	0.0	15.11
9	280.20	280.20	0.0	0.0	0.0	15.63
10	295.83	295.83	0.03	0.0	0.0	16.15
11	311.95	311.96	0.24	0.0	0.0	16.65
12	328.29	328.37	0.27	0.0	0.0	17.14
13	345.08	345.24	20.51	-0.04	0.0	17.26
14	335.57	341.95	5.66	-0.40	0.74	17.75
15	346.10	354.37	2.62	-0.38	1.70	18.43
16	362.20	371.50	1.29	-0.35	1.19	19.30
17	387.28	390.35	50.40	-0.73	0.93	19.70
18	343.32	359.85	2.49	-2.09	1.60	20.42
19	360.23	377.29	27.27	-2.60	1.79	21.36
20	345.01	370.57	69.19	-4.09	1.76	21.72
21	290.38	320.76	58.54	-6.56	2.36	21.85
22	231.39	279.87	8.63	-8.17	3.16	22.33
23	244.82	288.56	22.29	-8.53	3.31	22.89
24	255.27	283.93	9.94	-9.23	3.84	23.60
25	279.32	292.19	3.54	-9.57	3.97	24.48
26	296.02	307.53	8.17	-10.00	3.89	25.60
27	312.01	318.86	4.58	-10.50	3.81	26.75
28	329.22	334.34	50.52	-10.94	3.73	27.11
29	284.29	303.72	6.41	-11.90	4.21	27.34
30	297.59	316.95	40.41	-12.51	4.84	28.00
31	266.05	296.87	7.47	-13.81	5.45	28.91
32	292.84	309.94	119.25	-16.26	5.00	29.91
33	157.60	209.33	17.74	-20.13	4.73	30.56
34	161.35	206.75	10.32	-21.07	4.63	31.51
35	163.69	211.50	38.52	-22.19	4.54	32.33
36	166.92	187.66	14.38	-23.48	4.92	32.87
37	167.72	187.60	23.67	-24.78	4.98	33.99
38	153.80	178.12	17.07	-26.22	4.88	35.07
39	157.45	174.79	20.93	-27.73	4.78	36.34
40	147.78	167.26	58.98	-29.26	4.69	36.76
41	90.41	120.47	39.14	-30.94	5.45	36.44
42	54.98	92.29	22.76	-32.80	5.63	37.18
43	40.97	79.54	72.47	-34.74	5.52	37.53
44	-26.59	15.37	265.43	-39.75	5.41	35.62
45	-359.51	-248.78	61.97	-48.51	6.09	34.76
46	-444.59	-318.41	103.12	-52.19	6.62	34.12
47	-570.75	-432.98	302.52	-61.88	6.99	34.21
48	-900.67	-756.18	695.13	-86.51	6.61	34.92
49	-1836.08	-1496.30	35.45	-112.35	6.72	35.49
50	-1930.86	-1601.89	200.56	-119.96	6.81	34.59

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD
(CONTINUED)
TABLE 3- 2: SUMMARY PCLTF FINANCIAL STATISTICS
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	UNOBLIGATED BALANCE	BALANCE	NON-INTEREST EXPENDITURES	INTEREST PAYMENTS	TAX REVENUE	INTEREST REVENUE
51	-2180.79	-1881.00	147.97	-132.84	7.17	34.24
52	-2240.06	-2120.40	62.55	-143.91	7.29	34.72
53	-2416.16	-2284.84	918.87	-168.51	7.29	34.73
54	-3676.84	-3330.19	52.28	-205.51	7.29	34.82
55	-3871.78	-3545.86	151.00	-217.66	7.29	34.10
56	-4236.53	-3873.12	75.11	-232.29	7.66	33.48
57	-4226.85	-4139.37	326.97	-250.13	8.14	32.98
58	-4847.57	-4675.32	70.96	-272.86	8.63	33.24
59	-5126.44	-4977.28	828.95	-300.40	9.12	31.04
60	-6447.19	-6066.46	73.35	-341.11	9.60	30.51
61	-6747.52	-6440.79	73.59	-360.43	9.72	30.74
62	-7151.44	-6834.33	88.29	-381.01	9.72	30.97
63	-7336.90	-7262.91	591.08	-412.57	9.72	31.16
64	-8456.71	-8225.66	124.12	-452.86	9.72	31.19
65	-9014.53	-8761.71	624.02	-489.55	9.72	31.08
66	-10256.40	-9834.46	188.80	-534.43	9.72	29.49
67	-10813.02	-10518.47	118.22	-565.39	9.72	26.90
68	-11465.29	-11165.44	121.18	-598.14	9.72	26.59
69	-11984.27	-11848.41	122.27	-632.67	9.72	26.27
70	-12681.32	-12567.34	346.74	-670.22	9.72	22.91
71	-13734.96	-13551.65	134.55	-714.14	10.09	20.65
72	-14559.70	-14369.58	2183.15	-793.81	10.57	19.84
73	-18133.71	-17316.10	150.86	-904.88	10.70	19.11
74	-19119.86	-18342.01	408.65	-961.11	11.06	18.14
75	-20569.47	-19682.55	983.46	-1039.07	11.55	16.87
76	-22152.87	-21676.64	177.80	-1124.92	11.67	16.27
77	-23449.14	-22951.38	185.23	-1189.51	12.40	15.72
78	-24732.48	-24297.99	455.56	-1262.76	12.64	15.18
79	-26243.14	-25988.44	298.89	-1345.60	12.64	14.78
80	-27900.32	-27605.48	216.11	-1425.93	13.00	14.20
81	-29529.25	-29220.27	1814.62	-1538.44	13.13	14.12
82	-33261.99	-32546.04	233.19	-1678.37	13.13	14.36
83	-35143.41	-34430.04	254.80	-1775.11	13.13	14.60
84	-37177.63	-36432.17	251.13	-1877.38	13.13	14.84
85	-38765.48	-38532.67	265.58	-1985.01	13.13	15.06
86	-40998.12	-40754.99	326.92	-2099.72	13.13	15.28
87	-43418.23	-43153.15	299.99	-2221.71	13.13	15.47
88	-45927.16	-45646.20	2465.02	-2390.01	13.13	15.65
89	-51421.02	-50472.36	337.88	-2596.04	13.13	15.81
90	-54354.82	-53377.27	2809.71	-2791.11	13.13	15.94
91	-60714.75	-58948.91	366.59	-3029.11	13.13	16.04
92	-63422.64	-62315.36	724.47	-3207.37	13.13	15.83
93	-67473.75	-66217.94	4288.10	-3473.07	13.49	15.05
94	-75598.12	-73950.37	420.34	-3794.48	13.61	15.30
95	-79852.25	-78136.00	424.84	-4008.47	13.61	15.74
96	-84206.50	-82539.87	448.89	-4233.94	13.61	16.18
97	-87600.37	-87192.75	462.36	-4471.93	13.61	16.61
98	-92517.37	-92096.69	516.69	-4723.49	13.61	17.05
99	-97755.31	-97305.87	869.75	-4996.30	13.61	17.50
100	-103718.69	-103140.81	558.92	-5288.43	13.61	17.94

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3- 3: SUMMARY OF PCLTF BALANCE
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	FUND BALANCE					UNOBLIGATED FUND BALANCE				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
1	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
2	38.69	38.69	(0.0)	38.69	38.69	38.69	38.69	(0.0)	38.69	38.69
3	80.01	80.01	(0.0)	80.01	80.01	80.01	80.01	(0.0)	80.01	80.01
4	125.23	125.23	(0.0)	125.23	125.23	125.23	125.23	(0.0)	125.23	125.23
5	173.12	173.12	(0.0)	173.12	173.12	173.12	173.12	(0.0)	173.12	173.12
6	223.07	223.07	(0.0)	223.07	223.07	223.07	223.07	(0.0)	223.07	223.07
7	248.73	248.73	(0.0)	248.73	248.73	248.73	248.73	(0.0)	248.73	248.73
8	265.09	265.09	(0.0)	265.09	265.09	265.09	265.09	(0.0)	265.09	265.09
9	280.20	280.20	(0.0)	280.20	280.20	280.20	280.20	(0.0)	280.20	280.20
10	295.83	295.83	(0.0)	295.83	295.83	295.83	295.83	(0.0)	295.83	295.83
11	311.98	311.96	(0.0)	311.98	311.98	311.98	311.95	(0.0)	311.98	311.98
12	328.34	328.37	(0.2)	328.64	328.64	328.25	328.29	(0.3)	328.64	328.64
13	343.02	345.24	(0.3)	345.80	345.80	342.21	345.08	(0.4)	345.80	345.80
14	355.22	341.95	(20.6)	363.43	363.43	352.83	335.57	(26.7)	363.43	363.43
15	365.81	354.37	(21.3)	381.97	381.97	361.09	346.10	(27.8)	381.97	381.97
16	366.06	371.50	(21.3)	401.34	401.45	356.50	362.20	(28.0)	401.31	401.45
17	377.72	390.35	(21.4)	421.43	421.92	366.06	387.28	(21.7)	421.28	421.92
18	301.53	359.85	(53.8)	442.54	443.44	300.87	343.32	(67.7)	442.28	443.44
19	316.05	377.29	(56.3)	464.58	466.05	315.29	360.23	(71.0)	464.14	466.05
20	331.61	370.57	(70.5)	487.85	489.82	330.85	345.01	(87.7)	487.27	489.82
21	-830.93	320.76	(97.5)	511.05	514.80	-1040.24	290.38	(114.9)	510.73	514.80
22	-988.29	279.87	(111.1)	531.21	541.05	-1322.62	231.39	(133.3)	530.35	541.05
23	-1023.32	288.56	(115.8)	557.57	568.15	-1372.78	244.82	(136.2)	557.02	568.00
24	-1054.33	283.93	(122.1)	585.37	596.79	-1434.71	255.27	(131.0)	583.66	596.53
25	-1087.53	292.19	(126.8)	606.71	626.87	-1090.53	279.32	(128.6)	603.77	626.51
26	-1123.20	307.53	(132.2)	635.83	658.48	-1126.37	296.02	(133.6)	633.29	658.16
27	-1221.91	318.86	(139.2)	666.59	691.53	-1243.28	312.01	(140.0)	664.50	691.15
28	-1271.90	334.34	(145.3)	699.07	724.09	-1296.03	329.22	(146.2)	697.52	723.87
29	-1325.30	303.72	(152.3)	729.70	760.76	-1352.33	284.29	(155.1)	728.55	760.53
30	-1382.29	316.95	(159.1)	760.35	799.29	-1392.13	297.59	(161.5)	748.88	799.04
31	-1443.06	296.87	(168.7)	796.11	839.09	-1453.29	266.05	(173.0)	783.37	838.16
32	-1504.01	309.94	(176.5)	833.43	880.86	-1513.52	292.84	(179.1)	819.56	880.47
33	-2212.11	209.33	(238.6)	842.60	925.19	-2235.63	157.60	(261.7)	839.64	924.75
34	-2335.60	206.75	(249.4)	844.31	971.73	-2361.02	161.35	(271.9)	831.71	971.21
35	-2466.77	211.50	(261.3)	874.33	1020.45	-2494.13	163.69	(284.7)	858.70	1019.81
36	-2608.62	187.66	(277.4)	907.89	1071.09	-2638.72	166.92	(279.1)	886.35	1070.20
37	-2759.14	187.60	(292.5)	938.45	1118.83	-2790.98	167.72	(294.9)	927.56	1117.38
38	-2920.39	178.12	(307.0)	963.26	1172.87	-2954.51	153.80	(309.6)	948.82	1168.94
39	-3092.44	174.79	(322.8)	997.28	1220.52	-3128.38	157.45	(324.2)	983.13	1210.35
40	-3274.84	167.26	(338.8)	1032.06	1247.96	-3312.70	147.78	(339.8)	1017.96	1241.99
41	-3468.13	120.47	(353.1)	1000.02	1299.76	-3507.43	90.41	(353.7)	974.64	1294.30
42	-3674.12	92.29	(370.3)	1013.47	1335.66	-3714.93	54.98	(370.6)	893.55	1320.93
43	-3892.68	79.54	(389.6)	1050.66	1383.18	-3935.18	40.97	(390.1)	923.62	1365.55
44	-4125.68	15.37	(406.6)	743.68	1431.32	-4170.40	-26.59	(407.8)	727.34	1412.00
45	-4372.80	-248.78	(500.2)	673.09	1478.80	-4419.57	-359.51	(529.1)	658.00	1457.66
46	-4635.84	-318.41	(524.8)	401.70	1534.97	-4685.04	-444.59	(554.7)	377.63	1514.24
47	-4932.46	-432.98	(549.6)	333.74	1592.78	-4989.11	-570.75	(581.2)	243.47	1572.53
48	-5436.02	-756.18	(639.8)	343.87	1652.49	-5476.38	-900.67	(680.3)	324.63	1633.56
49	-8917.53	-1496.30	(940.2)	342.19	1714.10	-11441.02	-1836.08	(1111.0)	321.87	1694.11
50	-9414.77	-1601.89	(989.6)	335.53	1778.34	-12041.11	-1930.86	(1168.2)	314.18	1757.52

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD
(CONTINUED)
TABLE 3- 3: SUMMARY OF PCLTF BALANCE
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	FUND BALANCE					UNOBLIGATED FUND BALANCE				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
51	-10327.56	-1881.00	(1042.1)	195.69	1791.14	-10495.03	-2180.79	(1204.0)	159.77	1768.82
52	-10904.61	-2120.40	(1118.2)	176.84	1850.28	-11080.43	-2240.06	(1131.2)	138.85	1823.32
53	-11510.57	-2284.84	(1178.6)	154.40	1903.40	-11693.48	-2416.16	(1192.5)	114.05	1841.29
54	-12150.43	-3330.19	(1935.8)	126.65	1962.44	-12211.11	-3676.84	(2173.6)	83.71	1928.02
55	-12824.95	-3545.86	(2036.7)	96.00	2022.21	-12886.99	-3871.78	(2279.4)	50.49	1986.39
56	-13597.38	-3873.12	(2137.0)	-131.26	2074.90	-13679.89	-4236.53	(2387.8)	-157.65	2046.26
57	-14391.62	-4139.37	(2246.3)	-154.63	1921.91	-14489.19	-4226.85	(2247.4)	-181.98	1825.06
58	-15235.34	-4675.32	(2356.3)	-342.11	1921.96	-15350.58	-4847.57	(2359.5)	-403.88	1854.81
59	-16126.23	-4977.28	(2478.0)	-422.99	1941.11	-16239.82	-5126.44	(2482.2)	-487.35	1900.66
60	-17067.52	-6066.46	(2606.3)	-1320.86	1992.14	-17186.76	-6447.19	(2631.3)	-1369.61	1949.76
61	-18040.45	-6440.79	(2740.9)	-1431.50	1975.93	-18157.67	-6747.52	(2765.2)	-1483.02	1935.74
62	-19067.51	-6834.33	(2882.8)	-1550.40	2028.28	-19182.61	-7151.44	(2908.1)	-1603.91	1995.07
63	-20150.59	-7262.91	(3031.0)	-1681.26	2090.05	-20262.91	-7336.90	(3033.0)	-1738.12	2053.96
64	-21297.22	-8225.66	(3193.9)	-2901.42	2152.88	-21414.59	-8456.71	(3210.3)	-2972.95	2114.52
65	-22510.71	-8761.71	(3375.2)	-3285.28	2216.67	-22634.32	-9014.53	(3397.0)	-3405.57	2176.05
66	-23794.61	-9834.46	(3542.3)	-3661.48	2282.06	-23926.01	-10256.40	(3576.3)	-3720.16	2239.58
67	-25150.10	-10518.47	(3716.5)	-3899.63	2183.82	-25288.66	-10813.02	(3734.5)	-4051.07	2106.75
68	-26580.99	-11165.44	(3909.0)	-4215.93	2216.97	-26726.05	-11465.29	(3922.5)	-4347.55	2147.25
69	-28090.98	-11848.41	(4111.7)	-4568.68	2246.98	-28241.76	-11984.27	(4112.3)	-4704.30	2173.81
70	-29685.18	-12567.34	(4324.8)	-4916.93	2279.70	-29842.01	-12681.32	(4328.3)	-5049.59	2204.50
71	-31387.69	-13551.65	(4526.5)	-5306.27	1800.54	-31556.75	-13734.96	(4525.4)	-5711.79	1688.41
72	-33181.14	-14369.58	(4760.9)	-5704.42	1759.67	-33362.09	-14559.70	(4759.8)	-6052.97	1642.38
73	-51581.97	-17316.10	(5232.2)	-6632.44	1706.20	-51800.43	-18133.71	(5449.3)	-6739.43	1581.95
74	-54457.64	-18342.01	(5502.5)	-7083.18	1630.22	-54685.50	-19119.86	(5733.9)	-7195.68	1494.77
75	-57489.32	-19682.55	(5972.2)	-7562.98	1510.18	-57727.89	-20569.47	(6257.4)	-7681.46	1353.28
76	-60689.44	-21676.64	(6310.1)	-8073.10	1375.42	-60940.03	-22152.87	(6400.2)	-8196.32	1197.17
77	-64097.90	-22951.38	(6636.4)	-8615.09	1225.16	-64369.19	-23449.14	(6730.2)	-8743.80	1028.75
78	-67688.31	-24297.99	(6981.8)	-9190.06	1059.67	-67980.44	-24732.48	(7018.7)	-9324.05	855.57
79	-71474.25	-25988.44	(7325.4)	-10790.39	875.80	-71787.12	-26243.14	(7327.4)	-10889.71	663.64
80	-75470.75	-27605.48	(7719.3)	-11443.15	311.34	-75795.37	-27900.32	(7725.9)	-11547.00	-16.74
81	-79687.25	-29220.27	(8119.6)	-12156.62	-15.38	-80026.12	-29529.25	(8126.2)	-12271.64	-385.39
82	-90360.12	-32546.04	(8775.0)	-12912.37	-369.53	-98706.94	-33261.99	(8912.3)	-13039.23	-775.28
83	-95365.81	-34430.04	(9230.3)	-13710.41	-756.70	-103925.81	-35143.41	(9368.6)	-13849.02	-995.98
84	-100665.19	-36432.17	(9708.4)	-14845.24	-1054.76	-109441.06	-37177.63	(9852.1)	-15074.97	-1236.90
85	-106253.56	-38532.67	(10211.4)	-15765.21	-1313.94	-106664.87	-38765.48	(10218.8)	-16006.61	-1504.84
86	-112147.25	-40754.99	(10740.3)	-16737.41	-1586.90	-112582.75	-40998.12	(10747.7)	-16991.29	-1748.78
87	-118359.94	-43153.15	(11297.4)	-17759.31	-1843.79	-118813.25	-43418.23	(11305.5)	-17927.12	-2013.02
88	-124908.50	-45646.20	(11882.2)	-18843.12	-2118.54	-125379.62	-45927.16	(11890.5)	-19015.59	-2294.29
89	-131797.12	-50472.36	(12439.3)	-30049.50	-2415.52	-132281.87	-51421.02	(12466.9)	-30520.22	-2597.55
90	-139059.50	-53377.27	(13083.5)	-31797.55	-2738.23	-139559.00	-54354.82	(13112.2)	-32288.02	-2927.47
91	-156666.12	-58948.91	(14185.5)	-33656.06	-3088.19	-156919.69	-60714.75	(14416.8)	-34170.58	-3286.55
92	-164940.19	-62315.36	(14917.9)	-35920.99	-3479.17	-165205.44	-63422.64	(15143.1)	-36240.05	-3691.17
93	-173648.75	-66217.94	(15696.3)	-38019.34	-4051.28	-173925.87	-67473.75	(15932.7)	-38357.75	-4321.85
94	-182814.81	-73950.37	(16382.1)	-47020.11	-4875.05	-183103.69	-75598.12	(16542.1)	-47239.46	-5165.71
95	-192461.87	-78136.00	(17230.8)	-49660.96	-5448.53	-192763.06	-79852.25	(17397.6)	-49889.64	-5751.54
96	-202614.69	-82539.87	(18119.7)	-52447.51	-6075.12	-202928.31	-84206.50	(18288.0)	-52685.97	-6393.34
97	-213300.19	-87192.75	(19054.5)	-55388.04	-6747.84	-213626.87	-87600.37	(19065.2)	-55637.04	-7081.47
98	-224556.75	-92096.69	(20040.0)	-58490.32	-7470.65	-224900.25	-92517.37	(20050.8)	-58750.05	-7821.03
99	-236400.81	-97305.87	(21072.6)	-61763.27	-8246.56	-236761.25	-97755.31	(21083.7)	-62034.15	-8611.21
100	-248868.19	-103140.81	(22173.6)	-65216.36	-9081.53	-249246.81	-103718.69	(22189.9)	-65498.82	-9462.07

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3- 4: SUMMARY OF PCLTF TAX REVENUES, AND TOTAL MONITORING, CARE, RESPONSE, AND CLAIMS EXPENDITURES
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	TAX REVENUES					MONITORING, CARE, RESPONSE, AND CLAIMS PCLTF EXPENDITURES				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
1	37.56	37.56	(0.0)	37.56	37.56	0.0	0.0	(0.0)	0.0	0.0
2	36.62	36.62	(0.0)	36.62	36.62	0.0	0.0	(0.0)	0.0	0.0
3	35.89	35.89	(0.0)	35.89	35.89	0.0	0.0	(0.0)	0.0	0.0
4	35.17	35.17	(0.0)	35.17	35.17	0.0	0.0	(0.0)	0.0	0.0
5	34.47	34.47	(0.0)	34.47	34.47	0.0	0.0	(0.0)	0.0	0.0
6	8.57	8.57	(0.0)	8.57	8.57	0.0	0.0	(0.0)	0.0	0.0
7	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
8	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
9	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
10	0.0	0.0	(0.0)	0.0	0.0	0.0	0.03	(0.0)	0.0	0.0
11	0.0	0.0	(0.0)	0.0	0.0	0.0	0.24	(0.2)	0.0	0.30
12	0.0	0.0	(0.0)	0.0	0.0	0.0	0.27	(0.2)	0.0	0.72
13	0.0	0.0	(0.0)	0.0	0.0	0.0	20.51	(20.2)	0.0	1.05
14	0.0	0.74	(0.7)	0.0	0.0	0.0	5.66	(5.0)	0.0	4.84
15	0.0	1.70	(1.2)	0.0	0.0	0.0	2.62	(1.3)	0.10	11.70
16	0.0	1.19	(1.0)	0.0	0.0	0.0	1.29	(0.5)	0.12	5.24
17	0.0	0.93	(0.9)	0.0	0.0	0.0	50.40	(48.8)	0.37	5.02
18	0.0	1.60	(1.1)	0.0	0.0	0.0	2.49	(1.2)	0.38	5.04
19	0.0	1.79	(1.2)	0.0	0.0	0.0	27.27	(22.5)	0.21	38.30
20	0.0	1.76	(1.2)	0.0	0.0	0.0	69.19	(65.6)	0.55	14.98
21	0.0	2.36	(1.3)	0.0	18.62	0.0	58.54	(49.2)	0.64	28.94
22	0.0	3.16	(1.5)	0.0	24.45	0.20	8.63	(5.2)	1.02	15.96
23	0.0	3.31	(1.6)	0.0	23.96	0.21	22.29	(19.0)	1.31	16.60
24	0.0	3.84	(1.6)	0.0	23.48	0.22	9.94	(4.8)	1.56	18.91
25	0.0	3.97	(1.6)	0.0	23.01	0.18	3.54	(0.9)	1.79	10.26
26	0.0	3.89	(1.6)	0.0	22.55	0.19	8.17	(2.9)	1.63	42.24
27	0.0	3.81	(1.6)	0.0	22.10	0.19	4.58	(0.9)	2.50	11.89
28	0.0	3.73	(1.5)	0.0	21.66	0.20	50.52	(36.6)	2.72	29.52
29	0.0	4.21	(1.6)	0.0	21.23	0.27	6.41	(1.5)	3.21	20.71
30	0.0	4.84	(1.6)	0.0	20.80	0.41	40.41	(32.8)	3.07	23.93
31	0.0	5.45	(1.7)	0.0	20.39	0.43	7.47	(1.3)	4.96	22.33
32	0.0	5.00	(1.6)	0.0	19.98	0.67	119.25	(98.1)	6.73	25.88
33	0.0	4.73	(1.6)	0.0	19.58	0.64	17.74	(6.7)	8.72	30.06
34	0.0	4.63	(1.6)	0.0	19.19	1.26	10.32	(1.6)	8.78	21.46
35	0.0	4.54	(1.5)	0.0	18.80	1.92	38.52	(22.4)	9.64	48.74
36	0.0	4.92	(1.5)	0.0	18.43	3.90	14.38	(2.9)	8.92	34.94
37	0.0	4.98	(1.5)	0.0	18.06	4.48	23.67	(8.0)	11.33	38.22
38	0.0	4.88	(1.5)	0.0	17.70	4.87	17.07	(3.9)	12.18	37.92
39	0.0	4.78	(1.5)	0.0	17.34	5.99	20.93	(3.3)	14.23	61.94
40	0.0	4.69	(1.4)	0.0	17.00	6.68	58.98	(30.5)	15.09	42.78
41	0.0	5.45	(1.4)	0.0	16.66	8.90	39.14	(13.1)	16.87	99.91
42	0.0	5.63	(1.5)	0.0	16.32	9.51	22.76	(2.6)	17.39	44.31
43	0.0	5.52	(1.4)	0.0	16.00	10.75	72.47	(47.6)	19.60	49.84
44	0.0	5.41	(1.4)	0.0	15.68	13.00	265.43	(149.2)	25.05	915.08
45	0.0	6.09	(1.4)	0.0	15.36	14.11	61.97	(33.8)	23.11	56.35
46	0.0	6.62	(1.4)	0.0	15.06	14.86	103.12	(62.6)	30.28	74.16
47	0.0	6.99	(1.4)	0.0	14.75	15.82	302.52	(271.8)	25.83	67.11
48	0.0	6.61	(1.3)	0.0	14.46	17.91	695.13	(651.5)	30.36	96.68
49	0.0	6.72	(1.3)	0.0	14.17	18.44	35.45	(3.3)	28.37	63.58
50	0.0	6.81	(1.3)	0.0	14.10	22.60	200.56	(122.6)	38.88	386.67

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD
(CONTINUED)
TABLE 3- 4: SUMMARY OF PCLTF TAX REVENUES, AND TOTAL MONITORING, CARE, RESPONSE, AND CLAIMS EXPENDITURES
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	TAX REVENUES					MONITORING, CARE, RESPONSE, AND CLAIMS PCLTF EXPENDITURES				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
51	0.0	7.17	(1.3)	10.57	14.10	23.87	147.97	(101.1)	36.50	120.87
52	0.0	7.29	(1.3)	14.10	14.10	24.26	62.55	(10.6)	39.98	129.80
53	0.0	7.29	(1.3)	14.10	14.10	25.67	918.87	(851.2)	39.60	133.31
54	0.0	7.29	(1.3)	14.10	14.10	26.17	52.28	(5.8)	39.56	111.02
55	0.0	7.29	(1.3)	14.10	14.10	28.86	151.00	(89.7)	53.07	130.23
56	0.0	7.66	(1.3)	14.10	14.10	30.46	75.11	(12.8)	50.78	118.84
57	0.0	8.14	(1.3)	14.10	14.10	31.67	326.97	(229.8)	58.98	125.12
58	0.0	8.63	(1.3)	14.10	14.10	32.11	70.96	(8.5)	52.73	130.22
59	0.0	9.12	(1.3)	14.10	14.10	33.78	828.95	(530.9)	65.21	135.98
60	0.0	9.60	(1.2)	14.10	14.10	40.19	73.35	(6.0)	67.79	128.59
61	0.0	9.72	(1.2)	14.10	14.10	40.58	73.59	(6.0)	64.25	133.55
62	0.0	9.72	(1.2)	14.10	14.10	48.05	88.29	(10.6)	68.67	150.01
63	0.0	9.72	(1.2)	14.10	14.10	44.61	591.08	(447.3)	83.03	218.21
64	0.0	9.72	(1.2)	14.10	14.10	48.25	124.12	(22.6)	94.46	226.94
65	0.0	9.72	(1.2)	14.10	14.10	49.17	624.02	(497.5)	98.87	326.76
66	0.0	9.72	(1.2)	14.10	14.10	51.69	188.80	(56.4)	105.16	247.22
67	0.0	9.72	(1.2)	14.10	14.10	52.97	118.22	(10.9)	109.17	203.73
68	0.0	9.72	(1.2)	14.10	14.10	58.26	121.18	(9.8)	113.78	212.42
69	0.0	9.72	(1.2)	14.10	14.10	63.64	122.27	(10.1)	112.59	222.67
70	0.0	9.72	(1.2)	14.10	14.10	74.61	346.74	(213.6)	123.89	246.76
71	0.0	10.09	(1.2)	14.10	14.10	76.05	134.55	(11.0)	122.70	229.79
72	0.0	10.57	(1.1)	14.10	14.10	81.73	2183.15	(2037.5)	137.06	262.34
73	0.0	10.70	(1.1)	14.10	14.10	84.37	150.86	(11.6)	142.41	254.57
74	0.0	11.06	(1.1)	14.10	14.10	92.11	408.65	(226.9)	152.01	348.29
75	0.0	11.55	(1.0)	14.10	14.10	92.17	983.46	(814.8)	158.98	293.53
76	0.0	11.67	(1.0)	14.10	14.10	95.51	177.80	(13.3)	166.68	317.68
77	0.0	12.40	(0.8)	14.10	14.10	99.48	185.23	(14.2)	169.60	329.62
78	0.0	12.64	(0.8)	14.10	14.10	104.86	455.56	(263.3)	185.59	341.86
79	0.0	12.64	(0.8)	14.10	14.10	107.60	298.89	(74.3)	185.91	597.82
80	10.57	13.00	(0.7)	14.10	14.10	121.62	216.11	(15.7)	195.29	369.48
81	14.10	13.13	(0.7)	14.10	14.10	128.21	1814.62	(1597.3)	202.05	372.05
82	14.10	13.13	(0.7)	14.10	14.10	132.25	233.19	(17.3)	211.45	390.31
83	14.10	13.13	(0.7)	14.10	14.10	138.93	254.80	(19.5)	224.67	441.65
84	14.10	13.13	(0.7)	14.10	14.10	150.39	251.13	(18.2)	229.96	424.99
85	14.10	13.13	(0.7)	14.10	14.10	155.43	265.58	(19.0)	240.28	443.75
86	14.10	13.13	(0.7)	14.10	14.10	157.90	326.92	(53.2)	255.78	498.34
87	14.10	13.13	(0.7)	14.10	14.10	167.92	299.99	(22.1)	269.17	480.62
88	14.10	13.13	(0.7)	14.10	14.10	189.98	2465.02	(1487.9)	298.75	1124.92
89	14.10	13.13	(0.7)	14.10	14.10	191.18	337.88	(29.6)	294.01	545.20
90	14.10	13.13	(0.7)	14.10	14.10	198.76	2809.71	(2467.7)	310.66	567.33
91	14.10	13.13	(0.7)	14.10	14.10	209.36	366.59	(25.3)	319.66	568.42
92	14.10	13.13	(0.7)	14.10	14.10	224.72	724.47	(329.5)	386.89	660.21
93	14.10	13.49	(0.5)	14.10	14.10	225.94	4288.10	(3895.8)	358.02	642.94
94	14.10	13.61	(0.5)	14.10	14.10	240.73	420.34	(36.0)	372.62	669.63
95	14.10	13.61	(0.5)	14.10	14.10	252.44	424.84	(28.6)	398.38	688.27
96	14.10	13.61	(0.5)	14.10	14.10	262.54	448.89	(29.2)	418.06	715.80
97	14.10	13.61	(0.5)	14.10	14.10	264.45	462.36	(32.0)	421.72	756.55
98	14.10	13.61	(0.5)	14.10	14.10	276.39	516.69	(50.7)	439.30	889.40
99	14.10	13.61	(0.5)	14.10	14.10	287.25	869.75	(246.3)	466.75	1089.32
100	14.10	13.61	(0.5)	14.10	14.10	297.25	558.92	(44.1)	477.26	930.07

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3- 5: SUMMARY OF PCLTF INTEREST REVENUES AND PAYMENTS
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	INTEREST REVENUES					INTEREST PAYMENTS				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
1	1.12	1.12	(0.0)	1.12	1.12	0.0	0.0	(0.0)	0.0	0.0
2	4.70	4.70	(0.0)	4.70	4.70	0.0	0.0	(0.0)	0.0	0.0
3	9.33	9.33	(0.0)	9.33	9.33	0.0	0.0	(0.0)	0.0	0.0
4	12.72	12.72	(0.0)	12.72	12.72	0.0	0.0	(0.0)	0.0	0.0
5	15.48	15.48	(0.0)	15.48	15.48	0.0	0.0	(0.0)	0.0	0.0
6	17.09	17.09	(0.0)	17.09	17.09	0.0	0.0	(0.0)	0.0	0.0
7	16.35	16.35	(0.0)	16.35	16.35	0.0	0.0	(0.0)	0.0	0.0
8	15.11	15.11	(0.0)	15.11	15.11	0.0	0.0	(0.0)	0.0	0.0
9	15.63	15.63	(0.0)	15.63	15.63	0.0	0.0	(0.0)	0.0	0.0
10	16.15	16.15	(0.0)	16.15	16.15	0.0	0.0	(0.0)	0.0	0.0
11	16.65	16.65	(0.0)	16.66	16.66	0.0	0.0	(0.0)	0.0	0.0
12	17.06	17.14	(0.0)	17.16	17.16	0.0	0.0	(0.0)	0.0	0.0
13	17.26	17.26	(0.3)	17.64	17.64	0.0	-0.04	(0.0)	0.0	0.0
14	17.90	17.75	(0.6)	18.53	18.53	0.0	-0.40	(0.4)	0.0	0.0
15	18.56	18.43	(0.7)	19.48	19.48	0.0	-0.38	(0.4)	0.0	0.0
16	18.54	19.30	(0.7)	20.46	20.47	0.0	-0.35	(0.3)	0.0	0.0
17	14.66	19.70	(0.9)	21.49	21.52	0.0	-0.73	(0.5)	0.0	0.0
18	15.36	20.42	(1.1)	22.56	22.62	0.0	-2.09	(1.8)	0.0	0.0
19	16.11	21.36	(1.1)	23.69	23.77	0.0	-2.60	(2.0)	0.0	0.0
20	5.62	21.72	(1.3)	24.83	24.98	-18.77	-4.09	(2.5)	0.0	0.0
21	0.0	21.85	(1.6)	25.86	26.25	-42.06	-6.56	(3.5)	0.0	0.0
22	0.0	22.33	(1.8)	27.07	27.58	-50.23	-8.17	(4.0)	0.0	0.0
23	0.0	22.89	(1.9)	28.42	28.97	-51.79	-8.53	(4.1)	0.0	0.0
24	0.0	23.60	(2.1)	29.54	30.43	-53.39	-9.23	(4.3)	0.0	0.0
25	0.0	24.48	(2.2)	30.91	31.96	-55.09	-9.57	(4.5)	0.0	0.0
26	0.0	25.60	(2.3)	32.40	33.57	-58.05	-10.00	(4.7)	0.0	0.0
27	0.0	26.75	(2.4)	33.97	35.19	-62.09	-10.50	(4.9)	0.0	0.0
28	0.0	27.11	(2.6)	35.44	36.92	-64.65	-10.94	(5.1)	0.0	0.0
29	0.0	27.34	(2.9)	37.19	38.79	-67.39	-11.90	(5.3)	0.0	0.0
30	0.0	28.00	(3.1)	38.72	40.76	-70.31	-12.51	(5.6)	0.0	0.0
31	0.0	28.91	(3.3)	40.54	42.76	-73.36	-13.81	(5.9)	0.0	0.0
32	0.0	29.91	(3.4)	40.98	44.91	-107.16	-16.26	(7.0)	0.0	0.0
33	0.0	30.56	(3.6)	42.91	47.17	-113.01	-20.13	(9.5)	0.0	0.0
34	0.0	31.51	(3.8)	42.77	49.54	-119.34	-21.07	(10.0)	0.0	0.0
35	0.0	32.33	(4.0)	44.39	52.02	-126.10	-22.19	(10.6)	0.0	0.0
36	0.0	32.87	(4.3)	46.01	54.50	-133.36	-23.48	(11.3)	0.0	0.0
37	0.0	33.99	(4.5)	47.63	57.00	-141.10	-24.78	(11.9)	0.0	0.0
38	0.0	35.07	(4.6)	48.85	59.74	-149.37	-26.22	(12.6)	0.0	0.0
39	0.0	36.34	(4.8)	50.56	61.41	-158.17	-27.73	(13.2)	0.0	0.0
40	0.0	36.76	(4.9)	48.91	63.27	-167.50	-29.26	(14.0)	0.0	0.0
41	0.0	36.44	(5.1)	50.74	65.57	-177.41	-30.94	(14.7)	0.0	0.0
42	0.0	37.18	(5.2)	51.42	67.73	-187.96	-32.80	(15.6)	0.0	0.0
43	0.0	37.53	(5.3)	43.99	70.12	-199.17	-34.74	(16.4)	0.0	0.0
44	0.0	35.62	(5.7)	37.55	72.52	-211.09	-39.75	(18.6)	0.0	0.0
45	0.0	34.76	(6.0)	20.17	75.06	-223.76	-48.51	(22.2)	0.0	0.0
46	0.0	34.12	(6.4)	16.36	77.90	-237.54	-52.19	(23.3)	0.0	0.0
47	0.0	34.21	(6.6)	16.89	80.83	-252.54	-61.88	(24.8)	0.0	0.0
48	0.0	34.92	(6.8)	17.25	83.86	-389.31	-86.51	(30.8)	0.0	0.0
49	0.0	35.49	(7.0)	17.00	86.99	-455.58	-112.35	(44.4)	0.0	0.0
50	0.0	34.59	(7.1)	16.62	90.24	-488.19	-119.96	(46.9)	0.0	0.0

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD
(CONTINUED)
TABLE 3- 5: SUMMARY OF PCLTF INTEREST REVENUES AND PAYMENTS
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	INTEREST REVENUES					INTEREST PAYMENTS				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
51	0.0	34.24	(7.4)	9.44	90.74	-527.64	-132.84	(49.9)	0.0	0.0
52	0.0	34.72	(7.6)	8.43	93.49	-557.06	-143.91	(53.3)	0.0	0.0
53	0.0	34.73	(7.7)	7.21	96.37	-588.02	-168.51	(68.6)	0.0	0.0
54	0.0	34.82	(7.9)	5.77	99.34	-620.69	-205.51	(95.8)	0.0	0.0
55	0.0	34.10	(8.1)	4.16	101.80	-656.27	-217.66	(100.9)	-5.92	0.0
56	0.0	33.48	(8.3)	0.0	101.01	-695.34	-232.29	(106.1)	-7.00	0.0
57	0.0	32.98	(8.4)	0.0	96.20	-736.01	-250.13	(111.4)	-15.03	0.0
58	0.0	33.24	(8.6)	0.0	96.12	-779.12	-272.86	(117.2)	-18.63	0.0
59	0.0	31.04	(8.5)	0.0	98.11	-824.64	-300.40	(122.8)	-62.87	0.0
60	0.0	30.51	(8.7)	0.0	99.41	-872.35	-341.11	(129.8)	-68.17	0.0
61	0.0	30.74	(8.9)	0.0	99.76	-922.05	-360.43	(136.7)	-73.86	0.0
62	0.0	30.97	(9.2)	0.0	102.67	-974.50	-381.01	(143.9)	-80.03	0.0
63	0.0	31.16	(9.3)	0.0	105.78	-1029.89	-412.57	(151.1)	-138.99	0.0
64	0.0	31.19	(9.4)	0.0	108.94	-1088.52	-452.86	(159.8)	-152.35	0.0
65	0.0	31.08	(9.5)	0.0	112.16	-1150.57	-489.55	(168.2)	-176.23	0.0
66	0.0	29.49	(9.1)	0.0	108.23	-1216.16	-534.43	(177.1)	-187.69	0.0
67	0.0	26.90	(8.8)	0.0	109.92	-1285.41	-565.39	(186.5)	-200.63	0.0
68	0.0	26.59	(9.0)	0.0	111.52	-1358.50	-598.14	(196.3)	-217.57	0.0
69	0.0	26.27	(9.1)	0.0	113.08	-1435.64	-632.67	(206.7)	-235.14	0.0
70	0.0	22.91	(8.6)	0.0	91.15	-1517.45	-670.22	(217.5)	-253.34	0.0
71	0.0	20.65	(8.7)	0.0	89.36	-1604.35	-714.14	(228.5)	-272.99	0.0
72	0.0	19.84	(8.9)	0.0	87.08	-1696.00	-793.81	(239.7)	-318.57	0.0
73	0.0	19.11	(9.1)	0.0	83.99	-2635.23	-904.88	(264.4)	-340.34	0.0
74	0.0	18.14	(9.2)	0.0	79.37	-2782.06	-961.11	(281.8)	-363.44	0.0
75	0.0	16.87	(9.4)	0.0	73.09	-2936.94	-1039.07	(302.4)	-388.02	0.0
76	0.0	16.27	(9.6)	0.0	66.05	-3100.98	-1124.92	(319.7)	-414.15	0.0
77	0.0	15.72	(9.9)	0.0	58.25	-3274.96	-1189.51	(336.5)	-441.89	0.0
78	0.0	15.18	(10.1)	0.0	49.62	-3458.31	-1262.76	(353.7)	-520.69	0.0
79	0.0	14.78	(10.3)	0.0	33.35	-3651.71	-1345.60	(371.9)	-552.21	0.0
80	0.0	14.20	(10.6)	0.0	9.45	-3855.83	-1425.93	(391.8)	-586.01	0.0
81	0.0	14.12	(10.8)	0.0	0.0	-4070.82	-1538.44	(414.9)	-622.51	-7.35
82	0.0	14.36	(11.1)	0.0	0.0	-4615.74	-1678.37	(445.6)	-661.12	-25.69
83	0.0	14.60	(11.4)	0.0	0.0	-4871.74	-1775.11	(468.8)	-707.32	-45.47
84	0.0	14.84	(11.7)	0.0	0.0	-5142.36	-1877.38	(493.1)	-760.13	-57.61
85	0.0	15.06	(12.0)	0.0	0.0	-5427.74	-1985.01	(518.7)	-807.15	-70.96
86	0.0	15.28	(12.4)	0.0	0.0	-5728.66	-2099.72	(545.7)	-856.73	-84.20
87	0.0	15.47	(12.7)	0.0	0.0	-6045.86	-2221.71	(574.1)	-909.03	-97.39
88	0.0	15.65	(13.0)	0.0	0.0	-6379.95	-2390.01	(601.7)	-1424.26	-111.56
89	0.0	15.81	(13.4)	0.0	0.0	-6731.69	-2596.04	(632.1)	-1536.53	-126.90
90	0.0	15.94	(13.7)	0.0	0.0	-7102.49	-2791.11	(670.3)	-1626.07	-143.56
91	0.0	16.04	(14.1)	0.0	0.0	-7995.24	-3029.11	(721.1)	-1726.65	-161.83
92	0.0	15.83	(14.5)	0.0	0.0	-8417.45	-3207.37	(758.6)	-1836.92	-184.77
93	0.0	15.05	(14.9)	0.0	0.0	-8861.83	-3473.07	(790.4)	-2130.10	-227.19
94	0.0	15.30	(15.3)	0.0	0.0	-9329.55	-3794.48	(833.1)	-2402.53	-254.66
95	0.0	15.74	(15.7)	0.0	0.0	-9821.81	-4008.47	(876.2)	-2537.42	-284.35
96	0.0	16.18	(16.2)	0.0	0.0	-10339.88	-4233.94	(921.5)	-2679.76	-316.57
97	0.0	16.61	(16.6)	0.0	0.0	-10885.33	-4471.93	(969.2)	-2829.94	-351.17
98	0.0	17.05	(17.1)	0.0	0.0	-11459.66	-4723.49	(1019.3)	-2988.39	-388.34
99	0.0	17.50	(17.5)	0.0	0.0	-12064.07	-4996.30	(1072.1)	-3155.56	-428.27
100	0.0	17.94	(17.9)	0.0	0.0	-12711.77	-5288.43	(1128.0)	-3331.91	-471.12

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3- 6: SUMMARY OF ANNUAL PCLTF EXPENDITURES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	MONITORING		RESPONSE		POST-CLOSURE CARE		CLAIMS		INTEREST PAYMENTS	
YEAR	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)
1	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
2	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
3	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
4	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
5	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
6	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
7	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
8	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
9	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
10	0.00	(0.00)	0.01	(0.01)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
11	0.00	(0.00)	0.13	(0.11)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
12	0.00	(0.00)	0.14	(0.10)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
13	0.00	(0.00)	0.13	(0.08)	0.0	(0.0)	10.41	(10.41)	-0.02	(0.02)
14	0.01	(0.00)	0.24	(0.12)	0.0	(0.0)	2.54	(2.45)	-0.22	(0.22)
15	0.01	(0.00)	0.28	(0.10)	0.0	(0.0)	0.96	(0.55)	-0.20	(0.20)
16	0.01	(0.00)	0.36	(0.12)	0.0	(0.0)	0.23	(0.17)	-0.18	(0.18)
17	0.02	(0.00)	0.82	(0.49)	0.0	(0.0)	21.30	(20.98)	-0.35	(0.25)
18	0.01	(0.00)	0.70	(0.36)	0.0	(0.0)	0.34	(0.31)	-0.97	(0.84)
19	0.01	(0.00)	1.38	(0.66)	0.0	(0.0)	9.68	(9.04)	-1.16	(0.90)
20	0.01	(0.00)	1.17	(0.46)	0.0	(0.0)	25.85	(25.63)	-1.76	(1.07)
21	0.01	(0.00)	1.18	(0.44)	0.0	(0.0)	20.80	(18.46)	-2.71	(1.46)
22	0.01	(0.00)	1.42	(0.43)	0.0	(0.0)	1.69	(1.56)	-3.24	(1.58)
23	0.01	(0.00)	1.13	(0.34)	0.0	(0.0)	6.59	(6.57)	-3.26	(1.58)
24	0.01	(0.00)	1.29	(0.33)	0.0	(0.0)	2.02	(1.58)	-3.39	(1.58)
25	0.01	(0.00)	1.10	(0.27)	0.0	(0.0)	0.03	(0.03)	-3.38	(1.58)
26	0.01	(0.00)	1.14	(0.28)	0.0	(0.0)	1.37	(0.77)	-3.40	(1.59)
27	0.01	(0.00)	1.16	(0.27)	0.0	(0.0)	0.19	(0.09)	-3.43	(1.60)
28	0.01	(0.00)	1.43	(0.33)	0.0	(0.0)	12.98	(10.41)	-3.43	(1.61)
29	0.02	(0.00)	1.40	(0.30)	0.0	(0.0)	0.35	(0.31)	-3.59	(1.61)
30	0.01	(0.00)	1.66	(0.35)	0.0	(0.0)	8.99	(8.47)	-3.63	(1.62)
31	0.02	(0.00)	1.70	(0.30)	0.00	(0.00)	0.18	(0.12)	-3.85	(1.63)
32	0.03	(0.01)	1.72	(0.31)	0.02	(0.00)	27.32	(23.93)	-4.37	(1.88)
33	0.04	(0.00)	2.00	(0.30)	0.04	(0.00)	2.08	(1.46)	-5.19	(2.46)
34	0.07	(0.00)	1.91	(0.30)	0.10	(0.01)	0.25	(0.15)	-5.23	(2.48)
35	0.10	(0.00)	2.09	(0.34)	0.15	(0.01)	6.01	(4.71)	-5.29	(2.52)
36	0.13	(0.01)	2.15	(0.36)	0.19	(0.01)	0.53	(0.35)	-5.39	(2.59)
37	0.16	(0.01)	2.42	(0.38)	0.23	(0.01)	1.93	(1.60)	-5.47	(2.63)
38	0.19	(0.00)	2.35	(0.48)	0.28	(0.01)	0.47	(0.37)	-5.56	(2.67)
39	0.22	(0.01)	2.33	(0.35)	0.32	(0.02)	1.01	(0.55)	-5.66	(2.70)
40	0.25	(0.01)	2.33	(0.31)	0.36	(0.02)	7.58	(5.45)	-5.74	(2.74)
41	0.28	(0.01)	2.89	(0.57)	0.41	(0.02)	3.13	(2.22)	-5.83	(2.78)
42	0.30	(0.01)	2.93	(0.41)	0.45	(0.02)	0.07	(0.04)	-5.95	(2.82)
43	0.33	(0.01)	3.02	(0.46)	0.49	(0.02)	7.64	(7.60)	-6.06	(2.86)
44	0.35	(0.01)	2.99	(0.37)	0.52	(0.02)	36.59	(22.69)	-6.66	(3.12)
45	0.38	(0.01)	3.03	(0.37)	0.57	(0.02)	5.11	(4.91)	-7.82	(3.58)
46	0.40	(0.01)	3.10	(0.40)	0.60	(0.02)	10.44	(8.84)	-8.09	(3.62)
47	0.42	(0.01)	3.11	(0.39)	0.63	(0.02)	36.83	(36.73)	-9.22	(3.70)
48	0.44	(0.01)	3.32	(0.42)	0.66	(0.02)	86.13	(84.62)	-12.40	(4.41)
49	0.46	(0.01)	3.29	(0.40)	0.69	(0.02)	0.00	(0.00)	-15.48	(6.11)
50	0.48	(0.01)	4.12	(0.83)	0.73	(0.02)	18.83	(14.77)	-15.89	(6.21)

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD
(CONTINUED)
TABLE 3- 6: SUMMARY OF ANNUAL PCLTF EXPENDITURES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	MONITORING		RESPONSE		POST-CLOSURE CARE		CLAIMS		INTEREST PAYMENTS	
YEAR	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)
51	0.49	(0.01)	3.73	(0.54)	0.74	(0.02)	12.17	(11.67)	-16.92	(6.35)
52	0.51	(0.01)	4.04	(0.60)	0.78	(0.02)	1.64	(0.99)	-17.63	(6.53)
53	0.52	(0.01)	4.01	(0.58)	0.79	(0.02)	93.06	(91.01)	-19.85	(8.09)
54	0.54	(0.01)	3.97	(0.58)	0.82	(0.03)	0.05	(0.05)	-23.27	(10.85)
55	0.55	(0.01)	4.12	(0.54)	0.85	(0.03)	9.43	(8.89)	-23.70	(10.98)
56	0.57	(0.01)	4.23	(0.51)	0.87	(0.03)	1.48	(1.08)	-24.32	(11.11)
57	0.59	(0.01)	4.23	(0.48)	0.89	(0.03)	24.22	(21.07)	-25.18	(11.22)
58	0.60	(0.01)	4.29	(0.49)	0.92	(0.03)	0.43	(0.41)	-26.42	(11.34)
59	0.60	(0.01)	4.44	(0.49)	0.95	(0.03)	64.15	(45.01)	-27.96	(11.43)
60	0.63	(0.01)	4.19	(0.46)	0.97	(0.03)	0.18	(0.18)	-30.53	(11.62)
61	0.64	(0.01)	4.12	(0.46)	1.00	(0.03)	0.0	(0.0)	-31.02	(11.76)
62	0.66	(0.01)	4.50	(0.57)	1.02	(0.03)	0.46	(0.30)	-31.53	(11.90)
63	0.67	(0.01)	4.75	(0.59)	1.04	(0.03)	36.29	(32.40)	-32.83	(12.02)
64	0.68	(0.01)	5.28	(0.65)	1.06	(0.03)	1.61	(1.32)	-34.65	(12.23)
65	0.69	(0.01)	5.57	(0.69)	1.08	(0.03)	34.39	(32.96)	-36.01	(12.37)
66	0.70	(0.01)	5.31	(0.59)	1.10	(0.03)	5.02	(3.47)	-37.80	(12.53)
67	0.72	(0.01)	5.29	(0.60)	1.13	(0.03)	0.18	(0.12)	-38.46	(12.69)
68	0.74	(0.01)	5.22	(0.58)	1.16	(0.03)	0.09	(0.07)	-39.12	(12.84)
69	0.74	(0.01)	5.06	(0.57)	1.18	(0.03)	0.00	(0.00)	-39.79	(13.00)
70	0.75	(0.01)	5.17	(0.58)	1.20	(0.03)	11.94	(11.85)	-40.53	(13.15)
71	0.76	(0.01)	5.13	(0.58)	1.22	(0.03)	0.00	(0.00)	-41.52	(13.28)
72	0.78	(0.01)	5.28	(0.55)	1.25	(0.03)	103.64	(103.59)	-44.38	(13.40)
73	0.79	(0.01)	5.24	(0.55)	1.27	(0.03)	0.07	(0.04)	-48.64	(14.21)
74	0.81	(0.01)	5.42	(0.56)	1.30	(0.03)	11.68	(10.56)	-49.68	(14.56)
75	0.81	(0.01)	5.37	(0.54)	1.32	(0.03)	36.92	(36.90)	-51.64	(15.03)
76	0.83	(0.01)	5.45	(0.56)	1.35	(0.03)	0.10	(0.08)	-53.76	(15.28)
77	0.84	(0.01)	5.47	(0.56)	1.37	(0.03)	0.05	(0.05)	-54.66	(15.46)
78	0.85	(0.01)	5.44	(0.54)	1.39	(0.04)	10.61	(10.61)	-55.79	(15.63)
79	0.86	(0.01)	5.63	(0.58)	1.42	(0.04)	3.63	(2.73)	-57.17	(15.80)
80	0.87	(0.01)	5.64	(0.57)	1.44	(0.04)	0.08	(0.08)	-58.25	(16.01)
81	0.88	(0.01)	5.63	(0.57)	1.46	(0.04)	56.82	(56.82)	-60.43	(16.29)
82	0.90	(0.01)	5.61	(0.57)	1.48	(0.04)	0.02	(0.02)	-63.39	(16.83)
83	0.90	(0.01)	5.65	(0.58)	1.50	(0.04)	0.36	(0.31)	-64.46	(17.02)
84	0.92	(0.01)	5.53	(0.56)	1.53	(0.04)	0.0	(0.0)	-65.55	(17.22)
85	0.93	(0.01)	5.60	(0.56)	1.55	(0.04)	0.03	(0.03)	-66.65	(17.42)
86	0.94	(0.01)	5.79	(0.60)	1.57	(0.04)	1.29	(1.20)	-67.79	(17.62)
87	0.95	(0.01)	5.88	(0.60)	1.59	(0.04)	0.04	(0.03)	-68.97	(17.82)
88	0.96	(0.01)	5.94	(0.57)	1.61	(0.04)	58.37	(40.23)	-71.34	(17.96)
89	0.97	(0.01)	5.90	(0.59)	1.63	(0.04)	0.31	(0.31)	-74.51	(18.14)
90	0.98	(0.01)	5.88	(0.59)	1.66	(0.04)	61.97	(61.97)	-77.02	(18.50)
91	1.00	(0.01)	5.92	(0.57)	1.68	(0.04)	0.25	(0.23)	-80.38	(19.13)
92	1.00	(0.01)	5.94	(0.55)	1.69	(0.04)	8.17	(7.58)	-81.83	(19.35)
93	1.01	(0.01)	5.96	(0.57)	1.72	(0.04)	86.95	(86.95)	-85.20	(19.39)
94	1.02	(0.01)	5.93	(0.57)	1.73	(0.04)	0.33	(0.33)	-89.51	(19.65)
95	1.03	(0.01)	5.96	(0.57)	1.75	(0.04)	0.03	(0.03)	-90.92	(19.88)
96	1.03	(0.01)	6.08	(0.56)	1.77	(0.04)	0.02	(0.02)	-92.34	(20.10)
97	1.05	(0.01)	5.98	(0.59)	1.79	(0.04)	0.0	(0.0)	-93.78	(20.32)
98	1.05	(0.01)	6.25	(0.70)	1.80	(0.04)	0.37	(0.33)	-95.25	(20.55)
99	1.06	(0.01)	6.19	(0.66)	1.82	(0.04)	6.26	(4.27)	-96.87	(20.79)
100	1.07	(0.01)	6.20	(0.66)	1.84	(0.04)	0.36	(0.34)	-98.59	(21.03)

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3- 7A: FREQUENCY OF RELEASES AT FACILITIES
X = EXPECTED RELEASES; S = SIMULATED RELEASES; D = DETECTED RELEASES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

YEARS	IP ON			DETECTABLE ON			TOXIC ON			TASTE/ODOR			DETECTABLE OFF			TOXIC OFF			BATHTUB		
	X	S	D	X	S	D	X	S	D	X	S	D	X	S	D	X	S	D	X	S	D
< 1	472	472	--	458	458	--	373	373	--	54	54	--	70	70	--	60	60	--	0	0	--
1 - 10	60	59	401	71	69	331	65	64	259	31	30	42	41	40	87	34	33	69	0	0	0
11 - 20	14	13	11	35	32	25	31	28	17	28	27	18	38	37	31	33	31	23	0	0	0
21 - 30	11	9	7	29	26	16	26	24	12	24	23	15	34	31	26	27	25	17	0	0	0
31 - 40	11	9	6	26	23	11	21	18	8	20	11	7	31	14	9	24	14	8	0	0	0
41 - 50	11	10	6	22	19	7	20	17	6	17	6	4	29	9	4	20	7	4	0	0	0
51 - 60	12	11	6	20	17	5	19	16	5	13	5	3	25	9	2	18	6	2	0	0	0
61 - 70	9	8	4	14	12	4	14	12	3	10	5	3	19	7	3	14	5	2	0	0	0
71 - 80	10	9	4	12	10	3	13	10	3	7	3	2	13	5	2	10	4	1	0	0	0
81 - 90	9	8	5	8	7	3	9	7	2	5	2	1	8	4	2	6	3	1	0	0	0
91 -100	9	8	5	7	6	2	8	6	1	3	2	1	5	2	1	4	2	1	0	0	0
101 -150	32	--	--	23	--	--	27	--	--	5	--	--	5	--	--	4	--	--	0	--	--
>150	19	--	--	16	--	--	16	--	--	1	--	--	1	--	--	1	--	--	0	--	--
TOTAL	679	616	455	741	679	407	642	575	316	218	168	96	319	228	167	255	190	128	0	0	0

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3- 7B: FREQUENCY OF RELEASES AT FACILITIES WITH QUALIFICATION STATUS PENDING
S = SIMULATED RELEASES; D = DETECTED RELEASES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

	IP ON		DETECTABLE ON		TOXIC ON		TASTE/ODOR		DETECTABLE OFF		TOXIC OFF		BATHTUB	
YEARS	S	D	S	D	S	D	S	D	S	D	S	D	S	D
1 - 10	52	279	58	227	53	177	23	29	31	61	26	49	0	0
11 - 20	7	7	16	15	15	11	13	9	18	16	15	12	0	0
21 - 30	3	4	10	8	9	6	8	6	11	9	9	6	0	0
31 - 40	3	3	7	5	5	4	3	2	4	3	4	3	0	0
41 - 50	3	2	4	3	4	2	1	1	2	1	1	1	0	0
51 - 60	2	2	2	2	3	2	1	1	1	0	1	0	0	0
61 - 70	1	1	2	1	2	1	1	1	1	1	1	0	0	0
71 - 80	2	1	1	1	1	1	0	0	1	0	0	0	0	0
81 - 90	1	1	1	1	1	1	0	0	0	0	0	0	0	0
91 -100	1	1	0	0	1	0	0	0	0	0	0	0	0	0
TOTAL	75	301	101	263	94	205	50	49	69	91	57	71	0	0

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3- 7C: FREQUENCY OF RELEASES AT QUALIFIED FACILITIES
S = SIMULATED RELEASES; D = DETECTED RELEASES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

YEARS	IP ON		DETECTABLE ON		TOXIC ON		TASTE/ODOR		DETECTABLE OFF		TOXIC OFF		BATHTUB	
	S	D	S	D	S	D	S	D	S	D	S	D	S	D
1 - 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 - 20	2	1	2	1	2	0	1	1	2	1	1	0	0	0
21 - 30	3	2	4	1	4	1	2	1	3	1	2	1	0	0
31 - 40	4	3	6	2	5	2	2	2	3	2	3	1	0	0
41 - 50	4	2	5	2	5	2	2	1	3	2	3	1	0	0
51 - 60	5	3	5	2	5	2	2	1	4	1	3	1	0	0
61 - 70	4	3	5	2	4	2	2	1	3	1	2	1	0	0
71 - 80	4	3	4	1	4	1	1	1	2	1	1	1	0	0
81 - 90	4	3	3	1	3	1	1	1	2	1	1	0	0	0
91 -100	5	3	3	1	3	1	1	1	1	1	1	0	0	0
TOTAL	35	23	37	13	35	12	14	10	23	11	17	6	0	0

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3- 7D: FREQUENCY OF RELEASES AT UNQUALIFIED FACILITIES
S = SIMULATED RELEASES; D = DETECTED RELEASES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

	IP ON		DETECTABLE ON		TOXIC ON		TASTE/ODOR		DETECTABLE OFF		TOXIC OFF		BATHTUB	
YEARS	S	D	S	D	S	D	S	D	S	D	S	D	S	D
1 - 10	7	121	11	104	11	82	7	13	9	26	7	20	0	0
11 - 20	4	3	13	9	11	5	12	8	17	15	14	11	0	0
21 - 30	3	2	12	6	11	4	13	8	17	15	14	10	0	0
31 - 40	3	1	11	3	8	3	5	3	6	4	7	5	0	0
41 - 50	4	1	10	1	8	2	3	2	4	2	4	2	0	0
51 - 60	4	1	9	1	7	1	2	1	3	1	3	1	0	0
61 - 70	3	1	6	1	6	1	2	1	3	1	2	0	0	0
71 - 80	3	0	5	1	5	0	2	1	3	1	2	0	0	0
81 - 90	2	0	3	0	3	0	1	1	2	1	2	0	0	0
91 -100	2	0	3	0	2	0	1	0	1	0	1	0	0	0
TOTAL	35	130	83	126	72	98	48	38	65	66	56	49	0	0

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3- 8A: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
1	4.59	0.00	0.01	0.0	0.0	0.0	0.0
2	4.84	6.12	0.06	106.32	1.26	2.63	0.48
3	6.04	34.15	0.13	995.67	10.14	19.04	3.74
4	5.14	53.59	0.33	724.56	10.67	25.88	6.38
5	4.84	72.67	0.54	1286.82	12.89	28.77	6.28
6	4.31	88.10	0.71	1080.10	6.39	26.06	6.05
7	2.80	78.42	0.80	234.41	7.40	8.01	3.97
8	2.70	69.29	0.82	112.44	2.46	3.31	0.94
9	2.62	59.78	0.74	132.43	3.14	5.35	0.82
10	2.49	49.17	0.66	208.42	1.75	6.20	1.05
11	2.40	39.69	0.61	65.74	1.66	3.57	0.67
12	2.34	38.13	0.56	252.32	2.41	3.44	0.94
13	2.27	38.88	0.54	135.34	3.07	4.82	0.75
14	2.19	37.55	0.51	175.75	4.85	2.67	0.82
15	2.13	36.26	0.51	145.89	1.26	6.17	0.52
16	2.08	35.06	0.49	117.83	1.99	2.78	0.75
17	2.03	34.76	0.48	90.46	2.61	2.09	0.52
18	1.96	33.35	0.45	209.62	1.30	3.23	0.79
19	1.92	33.48	0.43	107.27	1.13	2.02	0.75
20	1.86	32.16	0.40	147.05	1.24	4.14	0.46
21	1.83	31.30	0.38	65.61	1.66	3.49	0.48
22	1.78	30.05	0.37	103.86	0.66	3.39	0.44
23	1.72	28.84	0.34	33.56	2.22	2.54	0.36
24	1.68	28.30	0.34	104.74	1.29	3.33	0.42
25	1.63	28.16	0.31	139.46	1.01	1.54	0.38
26	1.59	27.22	0.30	18.80	0.50	0.89	0.21
27	1.56	26.37	0.28	30.18	0.49	2.53	0.33
28	1.53	25.73	0.30	67.08	0.41	0.57	0.29
29	1.49	25.25	0.30	58.81	0.59	2.65	0.31
30	1.46	24.92	0.31	114.56	2.17	0.85	0.27
31	1.44	24.67	0.31	290.80	1.17	2.10	0.31
32	1.39	23.45	0.30	12.66	0.33	0.10	0.13
33	1.35	22.98	0.28	76.89	0.63	0.85	0.27
34	1.33	22.41	0.26	3.72	0.18	1.67	0.10
35	1.30	21.74	0.25	19.06	0.48	1.60	0.13
36	1.27	21.13	0.25	59.28	0.05	0.31	0.04
37	1.23	20.35	0.25	0.0	0.08	0.33	0.04
38	1.21	19.87	0.26	27.11	0.43	0.71	0.31
39	1.18	19.53	0.26	16.35	2.63	1.97	0.13
40	1.15	18.81	0.25	10.30	1.45	0.63	0.13
41	1.13	17.91	0.24	0.49	0.03	0.03	0.04
42	1.10	17.58	0.25	0.0	0.00	0.01	0.04
43	1.08	16.55	0.23	101.63	0.00	0.0	0.04
44	1.05	15.77	0.23	33.64	0.98	0.18	0.13
45	1.03	15.40	0.24	33.59	0.04	0.07	0.04
46	1.01	14.84	0.23	0.0	0.01	0.0	0.06
47	0.99	14.53	0.22	0.0	0.10	0.0	0.06
48	0.96	13.94	0.22	17.44	0.04	0.31	0.04
49	0.94	13.81	0.21	0.0	0.01	0.01	0.04
50	0.92	13.50	0.20	0.0	0.00	0.31	0.0

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3- 8A: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
51	0.90	13.01	0.19	0.14	0.01	0.01	0.06
52	0.89	12.81	0.19	0.0	0.04	0.0	0.02
53	0.88	12.24	0.19	0.0	0.0	0.0	0.0
54	0.87	11.80	0.19	15.32	0.11	0.35	0.04
55	0.87	11.82	0.20	0.0	0.03	0.31	0.0
56	0.86	10.98	0.20	0.0	0.01	0.05	0.02
57	0.85	10.54	0.20	0.0	0.27	0.0	0.0
58	0.85	10.44	0.21	0.14	0.00	0.0	0.04
59	0.83	10.11	0.20	0.0	0.01	0.07	0.02
60	0.82	10.09	0.19	0.01	0.00	0.0	0.04
61	0.81	9.65	0.19	32.58	0.01	0.31	0.02
62	0.81	9.19	0.19	0.0	0.00	0.0	0.02
63	0.80	8.95	0.18	0.00	0.00	0.0	0.04
64	0.80	8.92	0.18	60.35	0.38	0.0	0.02
65	0.78	8.80	0.17	0.80	0.03	0.02	0.06
66	0.78	8.38	0.16	0.0	0.29	0.31	0.02
67	0.77	8.16	0.16	0.0	1.51	0.0	0.02
68	0.76	7.76	0.14	8.15	0.00	0.0	0.02
69	0.75	7.55	0.14	0.0	0.00	0.01	0.02
70	0.75	7.42	0.14	0.0	0.0	0.0	0.0
71	0.74	7.08	0.15	1.87	0.00	0.03	0.06
72	0.74	6.86	0.14	12.66	0.00	0.31	0.04
73	0.72	6.95	0.14	5.83	0.08	0.70	0.06
74	0.72	7.23	0.13	40.66	0.0	0.31	0.02
75	0.71	6.76	0.13	0.0	0.0	0.0	0.0
76	0.70	6.41	0.11	0.12	0.00	0.02	0.02
77	0.69	6.20	0.12	0.0	0.0	0.0	0.0
78	0.69	6.14	0.12	0.0	0.0	0.0	0.0
79	0.68	5.99	0.11	0.0	0.00	0.31	0.0
80	0.68	5.89	0.11	15.95	0.00	0.0	0.02
81	0.67	5.69	0.12	0.0	0.00	0.0	0.02
82	0.67	5.59	0.11	0.0	0.0	0.0	0.0
83	0.66	5.28	0.12	0.0	0.0	0.0	0.02
84	0.66	5.26	0.12	0.0	0.0	0.0	0.0
85	0.65	4.93	0.12	0.0	0.0	0.01	0.02
86	0.65	4.89	0.12	0.0	0.0	0.0	0.0
87	0.64	4.82	0.12	0.0	0.00	0.0	0.02
88	0.64	4.70	0.12	0.0	0.0	0.0	0.02
89	0.63	4.53	0.12	0.0	0.0	0.0	0.0
90	0.63	4.41	0.12	0.0	0.0	0.0	0.0
91	0.62	4.28	0.12	0.0	0.0	0.0	0.0
92	0.61	4.20	0.11	0.0	0.0	0.0	0.0
93	0.61	4.06	0.11	0.0	0.0	0.0	0.0
94	0.61	4.59	0.14	0.0	0.03	0.07	0.02
95	0.61	4.03	0.14	0.0	0.03	0.03	0.0
96	0.60	3.89	0.15	1.88	0.01	0.03	0.04
97	0.60	3.95	0.15	0.93	0.05	0.35	0.02
98	0.59	3.79	0.15	0.0	0.0	0.0	0.0
99	0.58	3.60	0.13	0.0	0.0	0.0	0.0
100	0.58	3.37	0.13	0.0	0.0	0.0	0.0

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3- 8B: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.00	0.0	0.01	0.0	0.0	0.0	0.0
7	0.01	0.0	0.03	0.0	0.0	0.0	0.0
8	0.03	0.0	0.06	0.0	0.0	0.0	0.0
9	0.07	0.0	0.13	0.0	0.0	0.0	0.0
10	0.12	0.01	0.19	0.0	0.0	0.0	0.0
11	0.16	0.13	0.25	0.0	0.0	0.0	0.0
12	0.20	0.14	0.32	0.0	0.0	0.0	0.0
13	0.24	0.13	0.38	10.07	0.00	0.31	0.02
14	0.28	0.24	0.43	2.42	0.0	0.09	0.04
15	0.31	0.28	0.48	0.13	0.13	0.67	0.02
16	0.34	0.36	0.54	0.13	0.05	0.01	0.04
17	0.38	0.82	0.58	20.61	0.04	0.63	0.02
18	0.40	0.70	0.63	0.0	0.02	0.33	0.0
19	0.43	1.38	0.67	8.90	0.13	0.63	0.02
20	0.46	1.17	0.73	25.61	0.14	0.05	0.04
21	0.49	1.18	0.77	20.28	0.38	0.05	0.08
22	0.52	1.42	0.81	0.03	0.04	1.57	0.04
23	0.54	1.13	0.85	6.55	0.00	0.0	0.04
24	0.55	1.29	0.88	0.04	0.01	1.95	0.02
25	0.58	1.10	0.91	0.0	0.01	0.0	0.02
26	0.60	1.14	0.94	0.36	0.30	0.65	0.06
27	0.62	1.16	0.97	0.0	0.06	0.06	0.06
28	0.63	1.43	0.98	12.39	0.44	0.11	0.04
29	0.66	1.40	1.01	0.0	0.00	0.33	0.02
30	0.67	1.66	1.04	8.14	0.17	0.64	0.04
31	0.68	1.70	1.05	0.0	0.07	0.10	0.0
32	0.69	1.72	1.06	27.12	0.00	0.09	0.10
33	0.69	2.00	1.08	1.66	0.20	0.14	0.08
34	0.70	1.91	1.10	0.12	0.02	0.02	0.08
35	0.71	2.09	1.12	5.48	0.07	0.42	0.04
36	0.72	2.15	1.14	0.01	0.03	0.42	0.06
37	0.73	2.42	1.15	0.0	0.02	1.88	0.04
38	0.74	2.35	1.17	0.08	0.04	0.33	0.02
39	0.75	2.33	1.19	0.0	0.04	0.94	0.02
40	0.77	2.33	1.21	7.37	0.02	0.09	0.10
41	0.78	2.89	1.22	2.26	0.37	0.39	0.10
42	0.79	2.93	1.25	0.0	0.02	0.01	0.04
43	0.80	3.02	1.27	7.26	0.03	0.33	0.02
44	0.81	2.99	1.30	36.08	0.07	0.33	0.10
45	0.82	3.03	1.31	4.93	0.01	0.09	0.08
46	0.83	3.10	1.33	8.42	0.02	1.90	0.10
47	0.84	3.11	1.36	36.40	0.04	0.37	0.02
48	0.86	3.32	1.38	85.22	0.13	0.67	0.10
49	0.87	3.29	1.41	0.0	0.00	0.0	0.0
50	0.88	4.12	1.44	15.59	1.21	1.92	0.10

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3- 8B: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
51	0.89	3.73	1.46	11.72	0.37	0.0	0.08
52	0.90	4.04	1.48	1.12	0.09	0.37	0.06
53	0.91	4.01	1.50	91.02	1.98	0.02	0.04
54	0.92	3.97	1.53	0.03	0.00	0.0	0.02
55	0.93	4.12	1.55	7.59	1.02	0.75	0.06
56	0.94	4.23	1.57	0.88	0.58	0.0	0.02
57	0.96	4.23	1.59	23.84	0.02	0.31	0.04
58	0.97	4.29	1.61	0.0	0.08	0.31	0.04
59	0.97	4.44	1.63	64.11	0.00	0.0	0.04
60	0.99	4.19	1.66	0.10	0.02	0.01	0.04
61	1.00	4.12	1.68	0.0	0.0	0.0	0.0
62	1.01	4.50	1.71	0.00	0.22	0.16	0.08
63	1.02	4.75	1.73	35.71	0.13	0.37	0.08
64	1.03	5.28	1.75	1.19	0.21	0.08	0.13
65	1.04	5.57	1.77	30.74	2.37	1.26	0.02
66	1.04	5.31	1.79	4.79	0.08	0.06	0.08
67	1.05	5.29	1.81	0.0	0.10	0.05	0.02
68	1.07	5.22	1.83	0.0	0.00	0.09	0.0
69	1.07	5.06	1.85	0.0	0.00	0.0	0.0
70	1.08	5.17	1.87	11.51	0.03	0.31	0.08
71	1.09	5.13	1.88	0.0	0.00	0.0	0.0
72	1.10	5.28	1.90	101.98	0.03	1.62	0.02
73	1.10	5.24	1.91	0.0	0.00	0.0	0.06
74	1.12	5.42	1.94	11.22	0.07	0.33	0.06
75	1.12	5.37	1.95	36.56	0.01	0.31	0.04
76	1.13	5.45	1.97	0.0	0.00	0.05	0.04
77	1.14	5.47	1.98	0.0	0.02	0.03	0.0
78	1.14	5.44	1.99	10.28	0.00	0.31	0.02
79	1.15	5.63	2.01	2.60	0.30	0.68	0.04
80	1.15	5.64	2.03	0.0	0.0	0.05	0.02
81	1.16	5.63	2.04	56.48	0.00	0.31	0.02
82	1.17	5.61	2.06	0.0	0.0	0.0	0.02
83	1.18	5.65	2.07	0.0	0.00	0.34	0.02
84	1.18	5.53	2.08	0.0	0.0	0.0	0.0
85	1.19	5.60	2.09	0.0	0.01	0.0	0.02
86	1.20	5.79	2.11	1.15	0.01	0.06	0.06
87	1.20	5.88	2.13	0.0	0.00	0.02	0.02
88	1.21	5.94	2.14	57.94	0.01	0.36	0.06
89	1.21	5.90	2.15	0.0	0.0	0.31	0.0
90	1.22	5.88	2.17	61.61	0.02	0.31	0.02
91	1.23	5.92	2.18	0.19	0.01	0.01	0.04
92	1.24	5.94	2.20	7.28	0.34	0.50	0.06
93	1.24	5.96	2.21	85.37	0.00	1.56	0.02
94	1.25	5.93	2.23	0.0	0.02	0.31	0.0
95	1.26	5.96	2.25	0.01	0.00	0.0	0.02
96	1.26	6.08	2.26	0.0	0.00	0.0	0.02
97	1.27	5.98	2.28	0.0	0.0	0.0	0.0
98	1.28	6.25	2.29	0.0	0.02	0.33	0.02
99	1.28	6.19	2.32	3.50	2.70	0.0	0.06
100	1.29	6.20	2.35	0.0	0.03	0.31	0.02

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3- 8C: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
1	0.48	5.04	0.30	115.55	1.90	3.05	0.92
2	1.03	11.13	0.79	125.71	0.93	4.98	0.59
3	1.53	23.47	1.24	292.61	6.37	10.26	2.18
4	1.66	31.26	1.57	624.68	6.23	10.86	2.43
5	1.59	35.85	1.86	386.24	2.04	11.25	2.01
6	1.46	42.09	1.84	365.69	6.35	8.43	1.53
7	0.97	36.68	1.83	101.48	1.99	9.39	1.63
8	0.95	32.56	1.83	22.39	0.14	2.65	0.23
9	0.97	31.87	1.90	165.95	0.58	3.10	0.31
10	0.99	31.71	1.98	245.95	4.49	6.16	0.50
11	1.03	32.49	2.06	503.81	1.72	4.06	0.92
12	1.05	34.01	2.13	342.91	0.72	5.26	0.50
13	1.06	36.22	2.17	69.28	0.59	2.33	0.63
14	1.07	38.23	2.20	86.79	0.66	3.41	0.52
15	1.10	40.28	2.24	265.79	4.58	6.91	0.65
16	1.08	41.23	2.27	105.08	4.93	5.66	0.65
17	1.08	42.86	2.31	322.43	1.48	8.78	0.59
18	1.09	44.41	2.35	149.04	5.60	3.68	0.69
19	1.11	46.12	2.38	242.85	1.70	4.72	0.63
20	1.11	47.52	2.42	258.29	1.15	7.40	0.71
21	1.12	49.28	2.45	262.84	2.15	5.28	0.65
22	1.13	51.47	2.49	97.96	2.89	5.30	0.79
23	1.13	52.77	2.51	75.39	3.55	4.48	0.59
24	1.12	52.89	2.54	115.85	0.84	3.71	0.59
25	1.12	54.02	2.56	143.40	1.72	5.03	0.79
26	1.13	55.42	2.59	193.36	1.69	5.73	0.61
27	1.14	56.64	2.61	150.01	1.36	4.19	0.50
28	1.14	57.50	2.62	54.23	4.27	1.35	0.59
29	1.14	59.71	2.62	77.06	4.18	5.84	0.63
30	1.13	60.75	2.60	483.88	4.04	3.00	0.56
31	1.09	61.34	2.53	246.10	1.21	3.67	0.40
32	0.94	62.21	2.35	206.74	1.67	3.89	0.63
33	0.81	62.85	2.21	97.59	0.25	1.42	0.38
34	0.69	62.91	2.08	48.11	1.23	0.68	0.25
35	0.58	63.23	1.99	52.12	0.59	1.41	0.29
36	0.54	63.79	1.98	36.77	0.15	1.72	0.17
37	0.53	64.24	1.98	66.45	0.11	0.05	0.15
38	0.51	64.88	1.99	24.24	0.51	0.95	0.19
39	0.51	65.29	2.00	61.07	0.14	0.85	0.29
40	0.50	66.04	2.02	1.87	0.50	0.14	0.10
41	0.49	66.83	2.04	49.92	0.47	0.38	0.15
42	0.49	67.02	2.04	2.47	0.07	0.08	0.06
43	0.48	67.87	2.05	44.38	0.04	0.39	0.10
44	0.48	68.59	2.06	130.58	0.19	1.91	0.13
45	0.46	69.18	2.07	0.03	0.37	0.44	0.13
46	0.45	69.86	2.09	84.77	0.07	3.31	0.10
47	0.45	70.39	2.10	16.52	0.02	1.95	0.06
48	0.45	71.00	2.10	30.96	0.03	0.12	0.17
49	0.44	71.77	2.11	5.37	0.58	1.73	0.04
50	0.43	71.91	2.11	0.68	0.02	0.01	0.08

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3- 8C: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
51	0.42	73.03	2.12	74.38	0.08	0.65	0.10
52	0.41	72.49	2.12	0.08	0.03	0.96	0.06
53	0.41	72.95	2.13	18.81	0.01	0.03	0.06
54	0.41	73.53	2.14	0.71	0.02	0.0	0.02
55	0.40	73.43	2.14	21.89	0.0	0.0	0.02
56	0.40	74.04	2.14	0.28	0.0	0.01	0.02
57	0.39	74.43	2.15	0.34	0.0	0.33	0.04
58	0.39	74.86	2.15	4.77	0.03	0.02	0.06
59	0.38	75.16	2.16	21.73	0.00	0.63	0.04
60	0.38	75.42	2.17	83.81	0.04	1.59	0.04
61	0.38	75.66	2.18	134.92	0.01	1.88	0.06
62	0.38	76.43	2.18	1.28	0.06	0.04	0.04
63	0.37	76.58	2.19	0.0	0.04	0.33	0.0
64	0.37	76.61	2.20	0.0	0.0	0.0	0.0
65	0.36	76.83	2.20	0.0	0.13	0.31	0.02
66	0.37	77.43	2.21	8.77	0.12	0.0	0.02
67	0.36	77.91	2.21	6.26	0.01	0.07	0.06
68	0.36	78.07	2.22	0.0	0.01	0.01	0.0
69	0.35	78.26	2.22	0.18	0.03	1.57	0.04
70	0.35	78.33	2.23	0.13	0.0	0.0	0.04
71	0.35	78.59	2.23	0.0	0.00	0.0	0.02
72	0.34	78.87	2.24	0.0	0.03	0.33	0.0
73	0.34	79.11	2.24	4.05	0.14	1.63	0.02
74	0.34	79.32	2.24	0.0	1.93	0.64	0.02
75	0.34	79.40	2.25	49.18	0.01	0.31	0.02
76	0.34	80.01	2.25	31.46	0.11	0.31	0.08
77	0.34	80.10	2.25	0.0	0.00	0.0	0.02
78	0.34	80.16	2.25	1.90	0.01	0.18	0.04
79	0.34	80.20	2.25	0.0	0.19	0.33	0.02
80	0.33	80.39	2.25	0.0	0.01	0.40	0.02
81	0.33	80.46	2.26	0.0	0.01	0.0	0.0
82	0.32	80.61	2.26	86.52	0.02	1.57	0.04
83	0.32	80.88	2.26	0.0	0.0	0.0	0.0
84	0.32	80.99	2.26	17.48	0.0	0.0	0.02
85	0.33	81.21	2.26	0.0	0.00	0.31	0.0
86	0.32	81.26	2.26	0.0	0.00	0.05	0.02
87	0.32	81.34	2.26	116.64	0.04	1.56	0.06
88	0.32	81.53	2.27	0.0	0.05	0.04	0.02
89	0.32	81.64	2.27	0.0	0.00	0.66	0.0
90	0.31	81.80	2.27	6.80	0.00	0.44	0.02
91	0.31	81.97	2.27	0.19	0.02	0.02	0.02
92	0.32	82.04	2.27	0.17	0.01	0.01	0.02
93	0.31	82.13	2.27	2.25	0.03	0.06	0.06
94	0.31	82.15	2.27	0.0	0.0	0.0	0.0
95	0.31	82.14	2.27	0.0	0.0	0.0	0.0
96	0.31	82.27	2.27	0.0	0.27	0.09	0.02
97	0.31	82.53	2.27	0.0	0.02	0.0	0.0
98	0.31	82.99	2.27	0.0	0.00	0.05	0.0
99	0.31	82.94	2.28	18.69	0.16	0.01	0.02
100	0.31	83.15	2.28	9.22	0.01	0.0	0.02

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3- 9A: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	4.8	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
3	6.0	0.0	0.0	0.0	33.2	0.0	0.1	0.9	0.1	0.0	0.0	0.0
4	5.1	0.0	0.0	0.1	49.2	0.0	0.4	3.9	0.3	0.0	0.0	0.0
5	4.7	0.0	0.0	0.1	63.6	0.0	0.9	8.2	0.5	0.0	0.0	0.0
6	4.2	0.0	0.0	0.1	76.4	0.0	1.2	10.5	0.7	0.0	0.0	0.0
7	2.7	0.0	0.0	0.1	65.0	0.0	1.3	12.0	0.8	0.0	0.0	0.0
8	2.6	0.0	0.0	0.1	57.0	0.0	1.2	11.1	0.8	0.0	0.0	0.0
9	2.5	0.0	0.0	0.1	50.9	0.0	0.9	8.0	0.7	0.0	0.0	0.0
10	2.5	0.0	0.0	0.0	43.9	0.0	0.5	4.7	0.6	0.0	0.0	0.0
11	2.4	0.0	0.0	0.0	36.5	0.0	0.3	2.9	0.6	0.0	0.0	0.0
12	2.3	0.0	0.0	0.0	36.0	0.0	0.2	1.9	0.5	0.0	0.0	0.0
13	2.2	0.0	0.0	0.0	37.0	0.0	0.2	1.7	0.5	0.0	0.0	0.0
14	2.2	0.0	0.0	0.0	35.7	0.0	0.2	1.7	0.5	0.0	0.0	0.0
15	2.1	0.0	0.0	0.0	34.4	0.0	0.2	1.7	0.5	0.0	0.0	0.0
16	2.1	0.0	0.0	0.0	33.5	0.0	0.2	1.4	0.5	0.0	0.0	0.0
17	2.0	0.0	0.0	0.0	33.3	0.0	0.1	1.3	0.5	0.0	0.0	0.0
18	1.9	0.0	0.0	0.0	32.0	0.0	0.1	1.2	0.4	0.0	0.0	0.0
19	1.9	0.0	0.0	0.0	32.2	0.0	0.1	1.2	0.4	0.0	0.0	0.0
20	1.9	0.0	0.0	0.0	30.9	0.0	0.1	1.1	0.4	0.0	0.0	0.0
21	1.8	0.0	0.0	0.0	30.1	0.0	0.1	1.1	0.4	0.0	0.0	0.0
22	1.8	0.0	0.0	0.0	29.3	0.0	0.1	0.7	0.4	0.0	0.0	0.0
23	1.7	0.0	0.0	0.0	28.2	0.0	0.1	0.6	0.3	0.0	0.0	0.0
24	1.7	0.0	0.0	0.0	27.7	0.0	0.1	0.6	0.3	0.0	0.0	0.0
25	1.6	0.0	0.0	0.0	27.6	0.0	0.1	0.5	0.3	0.0	0.0	0.0
26	1.6	0.0	0.0	0.0	26.7	0.0	0.1	0.5	0.3	0.0	0.0	0.0
27	1.6	0.0	0.0	0.0	25.9	0.0	0.0	0.4	0.3	0.0	0.0	0.0
28	1.5	0.0	0.0	0.0	25.2	0.0	0.1	0.5	0.3	0.0	0.0	0.0
29	1.5	0.0	0.0	0.0	24.8	0.0	0.0	0.4	0.3	0.0	0.0	0.0
30	1.4	0.0	0.0	0.0	24.6	0.0	0.0	0.3	0.3	0.0	0.0	0.0
31	1.4	0.0	0.0	0.0	24.2	0.0	0.0	0.4	0.3	0.0	0.0	0.0
32	1.4	0.0	0.0	0.0	23.1	0.0	0.0	0.3	0.3	0.0	0.0	0.0
33	1.3	0.0	0.0	0.0	22.6	0.0	0.0	0.4	0.3	0.0	0.0	0.0
34	1.3	0.0	0.0	0.0	22.0	0.0	0.0	0.4	0.3	0.0	0.0	0.0
35	1.3	0.0	0.0	0.0	21.4	0.0	0.0	0.3	0.3	0.0	0.0	0.0
36	1.3	0.0	0.0	0.0	20.8	0.0	0.0	0.3	0.2	0.0	0.0	0.0
37	1.2	0.0	0.0	0.0	20.0	0.0	0.0	0.3	0.2	0.0	0.0	0.0
38	1.2	0.0	0.0	0.0	19.6	0.0	0.0	0.3	0.3	0.0	0.0	0.0
39	1.2	0.0	0.0	0.0	19.4	0.0	0.0	0.1	0.3	0.0	0.0	0.0
40	1.1	0.0	0.0	0.0	18.7	0.0	0.0	0.1	0.2	0.0	0.0	0.0
41	1.1	0.0	0.0	0.0	17.7	0.0	0.0	0.2	0.2	0.0	0.0	0.0
42	1.1	0.0	0.0	0.0	17.2	0.0	0.0	0.3	0.2	0.0	0.0	0.0
43	1.1	0.0	0.0	0.0	16.2	0.0	0.0	0.3	0.2	0.0	0.0	0.0
44	1.0	0.0	0.0	0.0	15.5	0.0	0.0	0.3	0.2	0.0	0.0	0.0
45	1.0	0.0	0.0	0.0	15.1	0.0	0.0	0.2	0.2	0.0	0.0	0.0
46	1.0	0.0	0.0	0.0	14.5	0.0	0.0	0.3	0.2	0.0	0.0	0.0
47	1.0	0.0	0.0	0.0	14.2	0.0	0.0	0.3	0.2	0.0	0.0	0.0
48	1.0	0.0	0.0	0.0	13.7	0.0	0.0	0.3	0.2	0.0	0.0	0.0
49	0.9	0.0	0.0	0.0	13.5	0.0	0.0	0.2	0.2	0.0	0.0	0.0
50	0.9	0.0	0.0	0.0	13.2	0.0	0.0	0.3	0.2	0.0	0.0	0.0

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3- 9A: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.9	0.0	0.0	0.0	12.8	0.0	0.0	0.2	0.2	0.0	0.0	0.0
52	0.9	0.0	0.0	0.0	12.6	0.0	0.0	0.1	0.2	0.0	0.0	0.0
53	0.9	0.0	0.0	0.0	12.1	0.0	0.0	0.1	0.2	0.0	0.0	0.0
54	0.9	0.0	0.0	0.0	11.6	0.0	0.0	0.2	0.2	0.0	0.0	0.0
55	0.9	0.0	0.0	0.0	11.7	0.0	0.0	0.1	0.2	0.0	0.0	0.0
56	0.9	0.0	0.0	0.0	10.8	0.0	0.0	0.2	0.2	0.0	0.0	0.0
57	0.8	0.0	0.0	0.0	10.3	0.0	0.0	0.2	0.2	0.0	0.0	0.0
58	0.8	0.0	0.0	0.0	10.2	0.0	0.0	0.2	0.2	0.0	0.0	0.0
59	0.8	0.0	0.0	0.0	9.9	0.0	0.0	0.2	0.2	0.0	0.0	0.0
60	0.8	0.0	0.0	0.0	9.9	0.0	0.0	0.2	0.2	0.0	-0.0	0.0
61	0.8	0.0	0.0	0.0	9.5	0.0	0.0	0.2	0.2	0.0	0.0	0.0
62	0.8	0.0	0.0	0.0	9.1	0.0	0.0	0.1	0.2	0.0	0.0	0.0
63	0.8	0.0	0.0	0.0	8.8	0.0	0.0	0.1	0.2	0.0	0.0	0.0
64	0.8	0.0	0.0	0.0	8.8	0.0	0.0	0.1	0.2	0.0	0.0	0.0
65	0.8	0.0	0.0	0.0	8.7	0.0	0.0	0.1	0.2	0.0	0.0	0.0
66	0.8	0.0	0.0	0.0	8.2	0.0	0.0	0.2	0.2	0.0	0.0	0.0
67	0.8	0.0	0.0	0.0	8.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0
68	0.8	0.0	0.0	0.0	7.6	0.0	0.0	0.1	0.1	0.0	0.0	0.0
69	0.7	0.0	0.0	0.0	7.4	0.0	0.0	0.1	0.1	0.0	0.0	0.0
70	0.7	0.0	0.0	0.0	7.3	0.0	0.0	0.1	0.1	0.0	0.0	0.0
71	0.7	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
72	0.7	0.0	0.0	0.0	6.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0
73	0.7	0.0	0.0	0.0	6.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
74	0.7	0.0	0.0	0.0	7.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0
75	0.7	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0
76	0.7	0.0	0.0	0.0	6.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
77	0.7	0.0	0.0	0.0	6.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0
78	0.7	0.0	0.0	0.0	6.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0
79	0.7	0.0	0.0	0.0	5.9	0.0	0.0	0.1	0.1	0.0	0.0	0.0
80	0.7	0.0	0.0	0.0	5.8	0.0	0.0	0.1	0.1	0.0	0.0	0.0
81	0.7	0.0	0.0	0.0	5.6	0.0	0.0	0.1	0.1	0.0	0.0	0.0
82	0.7	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0
83	0.7	0.0	0.0	0.0	5.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
84	0.7	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0
85	0.7	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
86	0.6	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
87	0.6	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0
88	0.6	0.0	0.0	0.0	4.6	0.0	0.0	0.1	0.1	0.0	0.0	0.0
89	0.6	0.0	0.0	0.0	4.5	0.0	0.0	0.1	0.1	0.0	0.0	0.0
90	0.6	0.0	0.0	0.0	4.4	0.0	0.0	0.1	0.1	0.0	0.0	0.0
91	0.6	0.0	0.0	0.0	4.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0
92	0.6	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
93	0.6	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
94	0.6	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
95	0.6	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
96	0.6	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0
97	0.6	0.0	0.0	0.0	3.8	0.0	0.0	0.1	0.1	0.0	0.0	0.0
98	0.6	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0
99	0.6	0.0	0.0	0.0	3.5	0.0	0.0	0.1	0.1	0.0	0.0	0.0
100	0.6	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3- 9B: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
10	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
11	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0	0.0
12	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0	0.0
13	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.0	0.0
14	0.3	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.4	0.0	0.0	0.0
15	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.5	0.0	0.0	0.0
16	0.3	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.5	0.0	0.0	0.0
17	0.4	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.6	0.0	0.0	0.0
18	0.4	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.6	0.0	0.0	0.0
19	0.4	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.7	0.0	0.0	0.0
20	0.5	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.7	0.0	0.0	0.0
21	0.5	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.8	0.0	0.0	0.0
22	0.5	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.8	0.0	0.0	0.0
23	0.5	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.8	0.0	0.0	0.0
24	0.5	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.9	0.0	0.0	0.0
25	0.6	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.9	0.0	0.0	0.0
26	0.6	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.9	0.0	0.0	0.0
27	0.6	0.0	0.0	0.0	0.0	1.2	0.0	0.0	1.0	0.0	0.0	0.0
28	0.6	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.0	0.0	0.0	0.0
29	0.6	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.0	0.0	0.0	0.0
30	0.6	0.0	0.0	0.0	0.0	1.7	0.0	0.0	1.0	0.0	0.0	0.0
31	0.7	0.0	0.0	0.0	0.0	1.7	0.0	0.0	1.0	0.0	0.0	0.0
32	0.7	0.0	0.0	0.0	0.0	1.7	0.0	0.0	1.0	0.0	0.0	0.0
33	0.6	0.0	0.0	0.0	0.0	2.0	0.0	0.0	1.0	0.0	0.0	0.0
34	0.6	0.1	0.0	0.0	0.0	1.9	0.0	0.0	1.0	0.1	0.0	0.0
35	0.6	0.1	0.0	0.0	0.0	2.1	0.0	0.0	1.0	0.1	0.0	0.0
36	0.6	0.1	0.0	0.0	0.0	2.1	0.0	0.0	0.9	0.2	0.0	0.0
37	0.6	0.2	0.0	0.0	0.0	2.4	0.0	0.0	0.9	0.2	0.0	0.0
38	0.5	0.2	0.0	0.0	0.0	2.4	0.0	0.0	0.9	0.3	0.0	0.0
39	0.5	0.2	0.0	0.0	0.0	2.3	0.0	0.0	0.9	0.3	0.0	0.0
40	0.5	0.3	0.0	0.0	0.0	2.3	0.0	0.0	0.8	0.4	0.0	0.0
41	0.5	0.3	0.0	0.0	0.0	2.9	0.0	0.0	0.8	0.4	0.0	0.0
42	0.5	0.3	0.0	0.0	0.0	2.9	0.0	0.0	0.8	0.5	0.0	0.0
43	0.5	0.3	0.0	0.0	0.0	3.0	0.0	0.0	0.8	0.5	0.0	0.0
44	0.5	0.3	0.0	0.0	0.0	3.0	0.0	0.0	0.8	0.5	0.0	0.0
45	0.4	0.4	0.0	0.0	0.0	3.0	0.0	0.0	0.7	0.6	0.0	0.0
46	0.4	0.4	0.0	0.0	0.0	3.1	0.0	0.0	0.7	0.6	0.0	0.0
47	0.4	0.4	0.0	0.0	0.0	3.1	0.0	0.0	0.7	0.6	0.0	0.0
48	0.4	0.4	0.0	0.0	0.0	3.3	0.0	0.0	0.7	0.7	0.0	0.0
49	0.4	0.5	0.0	0.0	0.0	3.3	0.0	0.0	0.7	0.7	0.0	0.0
50	0.4	0.5	0.0	0.0	0.0	4.1	0.0	0.0	0.7	0.7	0.0	0.0

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3- 9B: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.4	0.5	0.0	0.0	0.0	3.7	0.0	0.0	0.7	0.7	0.0	0.0
52	0.4	0.5	0.0	0.0	0.0	4.0	0.0	0.0	0.7	0.8	0.0	0.0
53	0.4	0.5	0.0	0.0	0.0	4.0	0.0	0.0	0.7	0.8	0.0	0.0
54	0.4	0.5	0.0	0.0	0.0	4.0	0.0	0.0	0.7	0.8	0.0	0.0
55	0.4	0.6	0.0	0.0	0.0	4.1	0.0	0.0	0.7	0.9	0.0	0.0
56	0.4	0.6	0.0	0.0	0.0	4.2	0.0	0.0	0.7	0.9	0.0	0.0
57	0.4	0.6	0.0	0.0	0.0	4.2	0.0	0.0	0.7	0.9	0.0	0.0
58	0.4	0.6	0.0	0.0	0.0	4.3	0.0	0.0	0.7	0.9	0.0	0.0
59	0.4	0.6	0.0	0.0	0.0	4.4	0.0	0.0	0.7	0.9	0.0	0.0
60	0.4	0.6	0.0	0.0	0.0	4.2	0.0	0.0	0.7	1.0	0.0	0.0
61	0.4	0.6	0.0	0.0	0.0	4.1	0.0	0.0	0.7	1.0	0.0	0.0
62	0.4	0.7	0.0	0.0	0.0	4.5	0.0	0.0	0.7	1.0	0.0	0.0
63	0.3	0.7	0.0	0.0	0.0	4.8	0.0	0.0	0.7	1.0	0.0	0.0
64	0.3	0.7	0.0	0.0	0.0	5.3	0.0	0.0	0.7	1.1	0.0	0.0
65	0.3	0.7	0.0	0.0	0.0	5.6	0.0	0.0	0.7	1.1	0.0	0.0
66	0.3	0.7	0.0	0.0	0.0	5.3	0.0	0.0	0.7	1.1	0.0	0.0
67	0.3	0.7	0.0	0.0	0.0	5.3	0.0	0.0	0.7	1.1	0.0	0.0
68	0.3	0.7	0.0	0.0	0.0	5.2	0.0	0.0	0.7	1.2	0.0	0.0
69	0.3	0.7	0.0	0.0	0.0	5.1	0.0	0.0	0.7	1.2	0.0	0.0
70	0.3	0.8	0.0	0.0	0.0	5.2	0.0	0.0	0.7	1.2	0.0	0.0
71	0.3	0.8	0.0	0.0	0.0	5.1	0.0	0.0	0.6	1.2	0.0	0.0
72	0.3	0.8	0.0	0.0	0.0	5.3	0.0	0.0	0.6	1.2	0.0	0.0
73	0.3	0.8	0.0	0.0	0.0	5.2	0.0	0.0	0.6	1.3	0.0	0.0
74	0.3	0.8	0.0	0.0	0.0	5.4	0.0	0.0	0.6	1.3	0.0	0.0
75	0.3	0.8	0.0	0.0	0.0	5.4	0.0	0.0	0.6	1.3	0.0	0.0
76	0.3	0.8	0.0	0.0	0.0	5.4	0.0	0.0	0.6	1.3	0.0	0.0
77	0.3	0.8	0.0	0.0	0.0	5.5	0.0	0.0	0.6	1.4	0.0	0.0
78	0.3	0.9	0.0	0.0	0.0	5.4	0.0	0.0	0.6	1.4	0.0	0.0
79	0.3	0.9	0.0	0.0	0.0	5.6	0.0	0.0	0.6	1.4	0.0	0.0
80	0.3	0.9	0.0	0.0	0.0	5.6	0.0	0.0	0.6	1.4	0.0	0.0
81	0.3	0.9	0.0	0.0	0.0	5.6	0.0	0.0	0.6	1.5	0.0	0.0
82	0.3	0.9	0.0	0.0	0.0	5.6	0.0	0.0	0.6	1.5	0.0	0.0
83	0.3	0.9	0.0	0.0	0.0	5.6	0.0	0.0	0.6	1.5	0.0	0.0
84	0.3	0.9	0.0	0.0	0.0	5.5	0.0	0.0	0.5	1.5	0.0	0.0
85	0.3	0.9	0.0	0.0	0.0	5.6	0.0	0.0	0.5	1.5	0.0	0.0
86	0.2	0.9	0.0	0.0	0.0	5.8	0.0	0.0	0.5	1.6	0.0	0.0
87	0.2	1.0	0.0	0.0	0.0	5.9	0.0	0.0	0.5	1.6	0.0	0.0
88	0.2	1.0	0.0	0.0	0.0	5.9	0.0	0.0	0.5	1.6	0.0	0.0
89	0.2	1.0	0.0	0.0	0.0	5.9	0.0	0.0	0.5	1.6	0.0	0.0
90	0.2	1.0	0.0	0.0	0.0	5.9	0.0	0.0	0.5	1.7	0.0	0.0
91	0.2	1.0	0.0	0.0	0.0	5.9	0.0	0.0	0.5	1.7	0.0	0.0
92	0.2	1.0	0.0	0.0	0.0	5.9	0.0	0.0	0.5	1.7	0.0	0.0
93	0.2	1.0	0.0	0.0	0.0	6.0	0.0	0.0	0.5	1.7	0.0	0.0
94	0.2	1.0	0.0	0.0	0.0	5.9	0.0	0.0	0.5	1.7	0.0	0.0
95	0.2	1.0	0.0	0.0	0.0	6.0	0.0	0.0	0.5	1.7	0.0	0.0
96	0.2	1.0	0.0	0.0	0.0	6.1	0.0	0.0	0.5	1.8	0.0	0.0
97	0.2	1.0	0.0	0.0	0.0	6.0	0.0	0.0	0.5	1.8	0.0	0.0
98	0.2	1.1	0.0	0.0	0.0	6.2	0.0	0.0	0.5	1.8	0.0	0.0
99	0.2	1.1	0.0	0.0	0.0	6.2	0.0	0.0	0.5	1.8	0.0	0.0
100	0.2	1.1	0.0	0.0	0.0	6.2	0.0	0.0	0.5	1.8	0.0	0.0

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3- 9C: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	0.4	0.0	0.0	0.1	3.3	0.0	0.2	1.5	0.3	0.0	0.0	0.0
2	0.9	0.0	0.0	0.1	8.7	0.0	0.2	2.2	0.8	0.0	0.0	0.0
3	1.5	0.0	0.0	0.1	18.6	0.0	0.5	4.4	1.2	0.0	0.0	0.0
4	1.5	0.0	0.0	0.1	24.5	0.0	0.7	6.1	1.6	0.0	0.0	0.0
5	1.5	0.0	0.0	0.1	27.8	0.0	0.8	7.3	1.9	0.0	0.0	0.0
6	1.4	0.0	0.0	0.1	32.9	0.0	0.9	8.2	1.8	0.0	0.0	0.0
7	0.9	0.0	0.0	0.0	26.7	0.0	1.0	9.0	1.8	0.0	0.0	0.0
8	0.9	0.0	0.0	0.0	22.7	0.0	1.0	8.8	1.8	0.0	0.0	0.0
9	0.9	0.0	0.0	0.1	20.7	0.0	1.1	10.1	1.8	0.0	0.1	0.0
10	0.9	0.0	0.0	0.1	19.5	0.0	1.2	11.0	1.9	0.0	0.1	0.0
11	0.9	0.0	0.0	0.1	18.8	0.0	1.4	12.3	2.0	0.0	0.1	0.0
12	0.9	0.0	0.1	0.1	19.0	0.0	1.5	13.5	2.0	0.0	0.1	0.0
13	0.9	0.0	0.1	0.1	20.4	0.0	1.6	14.2	2.0	0.0	0.1	0.0
14	0.9	0.0	0.1	0.1	21.8	0.0	1.6	14.8	2.1	0.0	0.1	0.0
15	0.9	0.0	0.1	0.1	22.7	0.0	1.8	15.8	2.1	0.0	0.1	0.0
16	0.9	0.0	0.1	0.1	22.9	0.0	1.8	16.5	2.1	0.0	0.2	0.0
17	0.9	0.0	0.1	0.1	23.8	0.0	1.9	17.2	2.1	0.0	0.2	0.0
18	0.9	0.0	0.1	0.1	25.1	0.0	1.9	17.4	2.2	0.0	0.2	0.0
19	0.9	0.0	0.1	0.1	26.2	0.0	2.0	18.0	2.2	0.0	0.2	0.0
20	0.9	0.0	0.1	0.1	27.1	0.0	2.0	18.4	2.2	0.0	0.2	0.0
21	0.9	0.0	0.1	0.1	28.1	0.0	2.1	19.1	2.3	0.0	0.2	0.0
22	0.9	0.0	0.1	0.1	29.4	0.0	2.2	19.9	2.3	0.0	0.2	0.0
23	0.9	0.0	0.1	0.1	30.3	0.0	2.2	20.2	2.3	0.0	0.2	0.0
24	0.9	0.0	0.1	0.1	30.3	0.0	2.3	20.3	2.3	0.0	0.2	0.0
25	0.9	0.0	0.1	0.1	31.1	0.0	2.3	20.6	2.4	0.0	0.2	0.0
26	0.9	0.0	0.1	0.1	32.5	0.0	2.3	20.6	2.4	0.0	0.2	0.0
27	0.9	0.0	0.1	0.1	33.3	0.0	2.3	21.0	2.4	0.0	0.2	0.0
28	0.9	0.0	0.1	0.1	33.9	0.0	2.4	21.3	2.4	0.0	0.2	0.0
29	0.9	0.0	0.1	0.1	35.6	0.0	2.4	21.7	2.4	0.0	0.2	0.0
30	0.9	0.0	0.1	0.1	36.1	0.0	2.5	22.2	2.3	0.0	0.3	0.0
31	0.8	0.0	0.1	0.1	36.5	0.0	2.5	22.3	2.2	0.0	0.3	0.0
32	0.7	0.0	0.1	0.1	37.3	0.0	2.5	22.4	2.0	0.0	0.4	0.0
33	0.5	0.0	0.2	0.1	37.5	0.0	2.5	22.8	1.8	0.0	0.4	0.0
34	0.4	0.0	0.2	0.1	37.4	0.0	2.6	23.0	1.6	0.0	0.5	0.0
35	0.3	0.0	0.2	0.1	37.7	0.0	2.6	23.0	1.5	0.0	0.5	0.0
36	0.3	0.0	0.2	0.1	38.1	0.0	2.6	23.1	1.5	0.0	0.5	0.0
37	0.3	0.0	0.2	0.1	38.4	0.0	2.6	23.2	1.5	0.0	0.5	0.0
38	0.2	0.0	0.2	0.1	38.7	0.0	2.6	23.6	1.5	0.0	0.5	0.0
39	0.2	0.0	0.2	0.1	38.9	0.0	2.6	23.7	1.5	0.0	0.5	0.0
40	0.2	0.0	0.2	0.1	39.6	0.0	2.7	23.8	1.5	0.0	0.5	0.0
41	0.2	0.0	0.2	0.1	40.2	0.0	2.7	24.0	1.5	0.0	0.5	0.0
42	0.2	0.0	0.2	0.1	40.2	0.0	2.7	24.1	1.5	0.0	0.5	0.0
43	0.2	0.0	0.2	0.1	41.1	0.0	2.7	24.1	1.5	0.0	0.6	0.0
44	0.2	0.0	0.2	0.1	41.5	0.0	2.7	24.3	1.5	0.0	0.6	0.0
45	0.2	0.0	0.2	0.1	41.8	0.0	2.7	24.6	1.5	0.0	0.6	0.0
46	0.2	0.0	0.2	0.0	41.9	0.0	2.8	25.1	1.5	0.0	0.6	0.0
47	0.2	0.0	0.2	0.0	42.3	0.0	2.8	25.3	1.5	0.0	0.6	0.0
48	0.2	0.0	0.2	0.1	42.8	0.0	2.8	25.3	1.5	0.0	0.6	0.0
49	0.2	0.0	0.2	0.0	42.9	0.0	2.9	26.0	1.5	0.0	0.6	0.0
50	0.2	0.0	0.2	0.0	43.0	0.0	2.9	26.0	1.5	0.0	0.6	0.0

TABLE 3- 9C: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.2	0.0	0.2	0.0	43.2	0.0	3.0	26.9	1.5	0.0	0.6	0.0
52	0.2	0.0	0.2	0.0	43.1	0.0	2.9	26.4	1.5	0.0	0.6	0.0
53	0.2	0.0	0.2	0.0	43.5	0.0	2.9	26.5	1.5	0.0	0.6	0.0
54	0.2	0.0	0.2	0.0	44.1	0.0	2.9	26.5	1.5	0.0	0.6	0.0
55	0.2	0.0	0.2	0.0	43.8	0.0	3.0	26.7	1.5	0.0	0.6	0.0
56	0.2	0.0	0.2	0.0	44.2	0.0	3.0	26.8	1.5	0.0	0.6	0.0
57	0.2	0.0	0.2	0.0	44.5	0.0	3.0	27.0	1.6	0.0	0.6	0.0
58	0.2	0.0	0.2	0.0	44.5	0.0	3.0	27.4	1.6	0.0	0.6	0.0
59	0.1	0.0	0.2	0.0	44.6	0.0	3.1	27.5	1.6	0.0	0.6	0.0
60	0.1	0.0	0.2	0.0	44.7	0.0	3.1	27.7	1.6	0.0	0.6	0.0
61	0.1	0.0	0.2	0.0	44.7	0.0	3.1	27.9	1.6	0.0	0.6	0.0
62	0.1	0.0	0.2	0.0	44.9	0.0	3.2	28.4	1.6	0.0	0.6	0.0
63	0.1	0.0	0.2	0.0	45.0	0.0	3.2	28.4	1.6	0.0	0.6	0.0
64	0.1	0.0	0.2	0.0	45.1	0.0	3.2	28.4	1.6	0.0	0.6	0.0
65	0.1	0.0	0.2	0.0	45.1	0.0	3.2	28.5	1.6	0.0	0.6	0.0
66	0.1	0.0	0.2	0.0	45.5	0.0	3.2	28.7	1.6	0.0	0.6	0.0
67	0.1	0.0	0.2	0.0	45.6	0.0	3.2	29.1	1.6	0.0	0.6	0.0
68	0.1	0.0	0.2	0.0	45.9	0.0	3.2	29.0	1.6	0.0	0.6	0.0
69	0.1	0.0	0.2	0.0	45.7	0.0	3.3	29.3	1.6	0.0	0.6	0.0
70	0.1	0.0	0.2	0.0	45.7	0.0	3.3	29.3	1.6	0.0	0.6	0.0
71	0.1	0.0	0.2	0.0	46.0	0.0	3.3	29.4	1.6	0.0	0.6	0.0
72	0.1	0.0	0.2	0.0	46.0	0.0	3.3	29.6	1.6	0.0	0.6	0.0
73	0.1	0.0	0.2	0.0	45.9	0.0	3.4	29.8	1.6	0.0	0.6	0.0
74	0.1	0.0	0.2	0.0	45.8	0.0	3.4	30.0	1.6	0.0	0.6	0.0
75	0.1	0.0	0.2	0.0	45.9	0.0	3.4	30.1	1.6	0.0	0.6	0.0
76	0.1	0.0	0.2	0.0	45.9	0.0	3.5	30.6	1.6	0.0	0.7	0.0
77	0.1	0.0	0.2	0.0	45.9	0.0	3.5	30.7	1.6	0.0	0.7	0.0
78	0.1	0.0	0.2	0.0	45.9	0.0	3.5	30.8	1.6	0.0	0.7	0.0
79	0.1	0.0	0.2	0.0	45.9	0.0	3.5	30.8	1.6	0.0	0.7	0.0
80	0.1	0.0	0.2	0.0	46.0	0.0	3.5	30.9	1.6	0.0	0.7	0.0
81	0.1	0.0	0.2	0.0	46.1	0.0	3.5	30.9	1.6	0.0	0.7	0.0
82	0.1	0.0	0.2	0.0	46.0	0.0	3.5	31.1	1.6	0.0	0.7	0.0
83	0.1	0.0	0.2	0.0	46.1	0.0	3.5	31.2	1.6	0.0	0.7	0.0
84	0.1	0.0	0.2	0.0	46.2	0.0	3.5	31.3	1.6	0.0	0.7	0.0
85	0.1	0.0	0.2	0.0	46.3	0.0	3.5	31.4	1.6	0.0	0.7	0.0
86	0.1	0.0	0.2	0.0	46.2	0.0	3.6	31.5	1.6	0.0	0.7	0.0
87	0.1	0.0	0.2	0.0	46.0	0.0	3.6	31.7	1.6	0.0	0.7	0.0
88	0.1	0.0	0.2	0.0	46.0	0.0	3.6	31.9	1.6	0.0	0.7	0.0
89	0.1	0.0	0.2	0.0	46.0	0.0	3.6	32.0	1.6	0.0	0.7	0.0
90	0.1	0.0	0.2	0.0	46.0	0.0	3.6	32.2	1.6	0.0	0.7	0.0
91	0.1	0.0	0.2	0.0	46.0	0.0	3.7	32.3	1.6	0.0	0.7	0.0
92	0.1	0.0	0.2	0.0	45.8	0.0	3.7	32.6	1.6	0.0	0.7	0.0
93	0.1	0.0	0.2	0.0	45.8	0.0	3.7	32.6	1.6	0.0	0.7	0.0
94	0.1	0.0	0.2	0.0	45.8	0.0	3.7	32.7	1.6	0.0	0.7	0.0
95	0.1	0.0	0.2	0.0	45.6	0.0	3.7	32.8	1.6	0.0	0.7	0.0
96	0.1	0.0	0.2	0.0	45.7	0.0	3.7	32.9	1.6	0.0	0.7	0.0
97	0.1	0.0	0.2	0.0	45.6	0.0	3.7	33.2	1.6	0.0	0.7	0.0
98	0.1	0.0	0.2	0.0	45.6	0.0	3.8	33.6	1.6	0.0	0.7	0.0
99	0.1	0.0	0.2	0.0	45.5	0.0	3.8	33.6	1.6	0.0	0.7	0.0
100	0.1	0.0	0.2	0.0	45.6	0.0	3.8	33.8	1.6	0.0	0.7	0.0

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3-10A: ALLOCATION OF CLAIMS COSTS BY TYPE AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	106.3	0.0	0.0	0.0	1.3	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.5	0.0	0.0	0.0
3	972.3	0.0	10.9	0.0	10.1	0.0	0.0	0.0	18.4	0.0	0.0	0.0	3.6	0.0	0.0	0.1
4	684.2	0.0	0.0	0.0	10.5	0.0	0.0	0.0	24.5	0.0	0.0	0.0	6.0	0.0	0.0	0.4
5	1280.3	0.0	0.0	0.0	11.8	0.0	0.0	0.0	28.4	0.0	0.0	0.0	6.0	0.0	0.0	0.3
6	1080.1	0.0	0.0	0.0	6.2	0.0	0.0	0.0	26.0	0.0	0.0	0.0	5.8	0.0	0.0	0.3
7	234.4	0.0	0.0	0.0	6.5	0.0	0.4	0.0	8.0	0.0	0.0	0.0	3.7	0.0	0.0	0.3
8	103.8	0.0	0.0	0.0	1.9	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.8	0.0	0.0	0.1
9	132.2	0.0	0.0	0.0	3.1	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.8	0.0	0.0	0.0
10	206.3	0.0	0.0	0.0	1.7	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.9	0.0	0.0	0.1
11	65.7	0.0	0.0	0.0	1.7	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.6	0.0	0.0	0.0
12	252.3	0.0	0.0	0.0	2.4	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.9	0.0	0.0	0.0
13	135.2	0.0	0.0	0.0	2.1	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.7	0.0	0.0	0.0
14	175.4	0.0	0.0	0.0	4.8	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.8	0.0	0.0	0.0
15	145.8	0.0	0.0	0.0	1.3	0.0	0.0	0.0	6.2	0.0	0.0	0.0	0.5	0.0	0.0	0.0
16	117.8	0.0	0.0	0.0	2.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.7	0.0	0.0	0.0
17	69.2	0.0	0.0	0.0	2.5	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.5	0.0	0.0	0.0
18	209.6	0.0	0.0	0.0	1.3	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.8	0.0	0.0	0.0
19	84.9	0.0	0.0	0.0	1.1	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0
20	147.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.5	0.0	0.0	0.0
21	65.6	0.0	0.0	0.0	1.6	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.5	0.0	0.0	0.0
22	103.9	0.0	0.0	0.0	0.7	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.4	0.0	0.0	0.0
23	33.6	0.0	0.0	0.0	2.2	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.4	0.0	0.0	0.0
24	98.2	0.0	0.0	0.0	1.2	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
25	133.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0
26	18.8	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.2	0.0	0.0	0.0
27	30.2	0.0	0.0	0.0	0.5	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0
28	67.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.3	0.0	0.0	0.0
29	58.8	0.0	0.0	0.0	0.4	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.3	0.0	0.0	0.0
30	114.6	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.3	0.0	0.0	0.0
31	290.1	0.0	0.0	0.0	1.1	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0
32	12.7	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
33	76.9	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.3	0.0	0.0	0.0
34	3.7	0.0	0.0	0.0	0.2	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0
35	19.1	0.0	0.0	0.0	0.5	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
36	59.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	27.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.3	0.0	0.0	0.0
39	16.4	0.0	0.0	0.0	2.6	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
40	10.3	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
41	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	101.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	33.6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0
45	33.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
48	17.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3-10A: ALLOCATION OF CLAIMS COSTS BY TYPE AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	15.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	32.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	60.4	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
66	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
72	12.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	5.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0
74	40.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	15.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3-10B: ALLOCATION OF CLAIMS COSTS BY TYPE AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	20.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	8.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	25.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	20.3	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.4	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.1	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
28	0.0	12.4	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	8.1	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	27.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
33	0.0	1.7	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
34	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
35	0.0	5.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
41	0.0	2.3	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	36.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0
45	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
46	0.0	8.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.1	0.0	0.0
47	0.0	36.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	85.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	15.6	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.1	0.0	0.0

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3-10B: ALLOCATION OF CLAIMS COSTS BY TYPE AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.0	11.7	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
52	0.0	1.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0
53	0.0	91.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	7.6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.1	0.0	0.0
56	0.0	0.9	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
58	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
59	0.0	64.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0
63	0.0	35.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0
64	0.0	1.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
65	0.0	30.7	0.0	0.0	0.0	2.4	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0
66	0.0	4.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
67	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.0	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0
71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	0.0	102.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0
73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
74	0.0	11.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0
75	0.0	36.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
79	0.0	2.6	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
81	0.0	56.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	57.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	61.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
91	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	0.0	7.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0
93	0.0	85.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
99	0.0	3.5	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3-10C: ALLOCATION OF CLAIMS COSTS BY TYPE AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	54.4	0.0	0.0	0.0	1.6	0.0	0.0	0.0	2.0	0.0	0.3	0.0	0.7	0.0	0.0	0.2
2	91.7	0.0	34.0	0.0	0.9	0.0	0.0	0.0	3.1	0.0	0.3	0.0	0.5	0.0	0.0	0.0
3	246.4	0.0	0.0	0.0	6.3	0.0	0.0	0.0	9.5	0.0	0.0	0.0	1.8	0.0	0.0	0.3
4	359.8	0.0	0.0	0.0	6.2	0.0	0.0	0.0	8.7	0.0	0.0	0.0	2.1	0.0	0.0	0.3
5	384.4	0.0	0.0	0.0	1.9	0.0	0.0	0.0	11.1	0.0	0.0	0.0	1.9	0.0	0.0	0.1
6	303.4	0.0	0.0	0.0	6.1	0.0	0.0	0.0	7.3	0.0	0.0	0.0	1.3	0.0	0.0	0.2
7	54.9	0.0	0.0	0.0	1.9	0.0	0.1	0.0	7.5	0.0	0.3	0.0	1.4	0.0	0.0	0.2
8	5.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.2	0.0	0.0	0.0
9	160.8	0.0	0.0	0.0	0.5	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.2	0.0	0.0	0.1
10	243.7	0.0	0.0	0.0	4.4	0.0	0.0	0.0	5.8	0.0	0.0	0.0	0.5	0.0	0.0	0.0
11	259.5	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.6	0.0	0.0	0.3
12	66.2	0.0	0.0	0.0	0.7	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.3	0.0	0.0	0.2
13	45.5	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.4	0.0	0.0	0.3
14	29.7	0.0	0.0	0.0	0.6	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.4	0.0	0.0	0.1
15	150.4	0.0	0.0	0.0	0.7	0.0	0.0	0.0	4.0	0.0	0.1	0.0	0.4	0.0	0.0	0.2
16	97.2	0.0	0.0	0.0	4.9	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.5	0.0	0.0	0.2
17	188.9	0.0	0.0	0.0	1.1	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.4	0.0	0.0	0.2
18	75.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.4	0.0	0.0	0.3
19	164.1	0.0	0.0	0.0	1.6	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.4	0.0	0.0	0.2
20	215.3	0.0	0.0	0.0	0.8	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.5	0.0	0.0	0.2
21	82.6	0.0	0.0	0.0	0.5	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.4	0.0	0.0	0.3
22	51.9	0.0	0.0	0.0	2.2	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.5	0.0	0.0	0.3
23	23.6	0.0	0.0	0.0	2.3	0.0	0.1	0.0	1.4	0.0	0.7	0.0	0.4	0.0	0.0	0.2
24	93.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.4	0.0	0.0	0.2
25	68.3	0.0	0.0	0.0	0.7	0.0	0.2	0.0	4.2	0.0	0.0	0.0	0.4	0.0	0.0	0.4
26	62.5	0.0	0.0	0.0	1.3	0.0	0.1	0.0	2.5	0.0	0.3	0.0	0.4	0.0	0.0	0.2
27	127.7	0.0	0.0	0.0	0.6	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.3	0.0	0.0	0.2
28	48.6	0.0	0.0	0.0	4.1	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.4	0.0	0.0	0.2
29	28.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.4	0.0	0.0	0.3
30	101.8	0.0	0.0	0.0	4.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.4	0.0	0.0	0.2
31	184.7	0.0	0.0	0.0	0.2	0.0	0.3	0.0	2.3	0.0	0.0	0.0	0.2	0.0	0.0	0.2
32	49.3	0.0	0.0	0.0	1.1	0.0	0.5	0.0	0.7	0.0	0.0	0.0	0.4	0.0	0.0	0.2
33	38.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.2	0.0	0.0	0.1
34	16.7	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.1
35	25.5	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.1
36	6.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0
37	65.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
38	20.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0	0.1
39	59.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.3	0.0	0.0	0.0
40	0.2	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
41	0.6	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
42	2.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
43	14.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
44	55.4	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
46	84.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
47	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	29.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1
49	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
50	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1

TABLE 3-10C: ALLOCATION OF CLAIMS COSTS BY TYPE AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.1
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1
53	18.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	21.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	83.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	134.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	4.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	49.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	15.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	17.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87	116.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3-11: SUMMARY OF FACILITY/FIRM BANKRUPTCY STATUS BY YEAR AND BY NET WORTH FOR NON-GOVERNMENT OWNED FACILITIES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	FIRM NET WORTH IN 1982 DOLLARS											
	LESS THAN 10 MILLION			10 TO 100 MILLION			100 TO 1000 MILLION			GREATER THAN 1000 MILLION		
	SOLVENT FACILITIES	BANKRUPTCIES		SOLVENT FACILITIES	BANKRUPTCIES		SOLVENT FACILITIES	BANKRUPTCIES		SOLVENT FACILITIES	BANKRUPTCIES	
YEAR		NUMBER	(PERCENT)		NUMBER	(PERCENT)		NUMBER	(PERCENT)		NUMBER	(PERCENT)
1	243.9	11.59	(4.76)	109.8	0.10	(0.09)	223.8	0.48	(0.22)	341.2	0.59	(0.17)
2	232.3	2.76	(1.18)	109.7	0.31	(0.29)	223.3	0.38	(0.17)	340.6	0.24	(0.07)
3	229.6	9.55	(4.15)	109.4	0.45	(0.41)	222.9	0.66	(0.30)	340.3	0.86	(0.26)
4	220.0	26.34	(11.97)	109.0	1.24	(1.14)	222.2	0.66	(0.30)	339.5	0.45	(0.14)
5	193.7	24.21	(12.55)	107.7	1.28	(1.20)	221.6	0.52	(0.23)	339.0	1.07	(0.30)
6	169.4	19.38	(11.44)	106.4	1.93	(1.81)	221.1	1.69	(0.75)	338.0	1.14	(0.34)
7	150.2	17.62	(11.75)	105.1	1.31	(1.29)	220.4	1.00	(0.45)	337.8	0.90	(0.26)
8	133.1	9.28	(7.03)	104.4	0.76	(0.73)	220.8	0.59	(0.26)	339.9	1.14	(0.33)
9	124.4	7.31	(5.92)	104.9	0.79	(0.73)	222.6	0.45	(0.20)	342.0	1.45	(0.42)
10	117.5	5.48	(4.74)	105.2	0.59	(0.55)	224.7	0.48	(0.22)	343.9	0.72	(0.21)
11	112.4	6.21	(5.49)	105.6	0.86	(0.82)	226.1	0.83	(0.36)	346.5	1.41	(0.42)
12	106.5	4.83	(4.53)	105.6	0.69	(0.66)	227.3	0.52	(0.23)	347.8	1.48	(0.43)
13	102.0	4.00	(3.97)	105.9	0.55	(0.52)	228.8	0.62	(0.27)	349.5	0.90	(0.26)
14	98.6	3.83	(3.94)	106.5	0.69	(0.66)	229.9	0.69	(0.30)	351.7	1.45	(0.40)
15	95.1	3.76	(3.95)	106.7	0.97	(0.92)	231.1	1.00	(0.44)	353.2	1.62	(0.45)
16	91.7	3.10	(3.47)	106.2	0.62	(0.59)	231.4	0.52	(0.23)	354.0	0.97	(0.27)
17	88.7	2.86	(3.23)	106.7	0.97	(0.92)	232.9	0.52	(0.23)	355.8	0.62	(0.18)
18	86.1	2.76	(3.18)	106.3	0.79	(0.77)	233.6	0.48	(0.21)	357.1	0.31	(0.09)
19	83.6	2.28	(2.66)	106.2	1.10	(1.05)	234.2	0.55	(0.23)	358.4	0.55	(0.15)
20	81.7	2.69	(3.36)	105.6	0.76	(0.71)	234.6	0.62	(0.26)	359.9	1.03	(0.29)
21	79.2	2.38	(3.03)	105.3	0.79	(0.74)	234.8	0.38	(0.16)	360.2	0.66	(0.18)
22	77.0	2.55	(3.29)	105.1	0.76	(0.73)	235.4	0.52	(0.22)	360.9	0.55	(0.16)
23	74.6	2.14	(2.83)	104.7	0.83	(0.81)	235.8	0.69	(0.30)	361.8	1.21	(0.34)
24	72.6	2.21	(3.02)	104.1	0.90	(0.85)	235.8	0.59	(0.25)	361.7	0.62	(0.17)
25	70.5	1.86	(2.69)	103.7	0.66	(0.63)	236.0	0.21	(0.09)	362.0	0.72	(0.20)
26	68.7	1.55	(2.27)	103.3	0.45	(0.43)	236.6	0.69	(0.29)	362.4	0.97	(0.27)
27	67.2	1.10	(1.61)	103.1	0.83	(0.79)	236.4	0.69	(0.30)	362.5	1.07	(0.30)
28	66.2	1.14	(1.73)	102.6	0.76	(0.78)	236.1	1.07	(0.46)	362.3	1.79	(0.51)
29	65.2	1.38	(2.10)	102.1	0.66	(0.62)	235.6	0.79	(0.34)	361.4	0.62	(0.17)
30	63.9	1.41	(2.18)	101.9	0.62	(0.62)	235.4	0.72	(0.32)	361.5	0.93	(0.25)
31	62.6	1.31	(2.09)	101.5	0.72	(0.71)	235.2	0.55	(0.23)	361.2	1.10	(0.30)
32	61.5	1.41	(2.25)	101.1	0.79	(0.81)	235.2	0.79	(0.34)	360.8	0.48	(0.14)
33	60.1	0.79	(1.40)	100.7	0.41	(0.41)	235.0	1.10	(0.48)	360.9	1.72	(0.45)
34	59.4	0.93	(1.53)	100.4	0.45	(0.46)	234.2	0.38	(0.17)	359.9	1.34	(0.38)
35	58.7	0.93	(1.61)	100.1	0.48	(0.50)	234.4	0.45	(0.18)	359.2	0.31	(0.09)
36	57.8	1.17	(1.98)	99.7	0.66	(0.67)	234.4	0.66	(0.29)	359.4	1.00	(0.28)
37	56.8	1.07	(1.93)	99.3	0.59	(0.56)	234.2	0.28	(0.12)	359.1	0.55	(0.16)
38	55.9	1.03	(1.89)	99.0	0.31	(0.34)	234.2	0.38	(0.17)	359.3	0.45	(0.12)
39	54.9	0.76	(1.42)	98.9	0.72	(0.73)	234.0	0.52	(0.21)	359.5	0.72	(0.20)
40	54.1	0.79	(1.49)	98.4	0.59	(0.58)	233.8	0.31	(0.13)	359.2	0.34	(0.09)
41	53.3	0.59	(1.19)	97.9	0.34	(0.36)	233.8	0.79	(0.35)	359.3	0.48	(0.14)
42	52.8	0.86	(1.69)	97.7	0.62	(0.62)	233.2	0.38	(0.16)	359.1	1.00	(0.29)
43	52.0	0.72	(1.36)	97.1	0.28	(0.29)	233.1	0.59	(0.25)	358.4	1.03	(0.29)
44	51.3	0.59	(1.19)	97.1	0.38	(0.39)	233.0	0.62	(0.26)	358.2	0.59	(0.17)
45	50.8	0.66	(1.35)	96.9	0.38	(0.39)	232.7	0.48	(0.20)	358.1	0.52	(0.15)
46	50.1	0.48	(0.91)	96.5	0.59	(0.63)	232.4	0.31	(0.13)	358.3	1.07	(0.30)
47	49.7	0.76	(1.50)	96.1	0.55	(0.56)	232.4	1.14	(0.48)	357.9	1.24	(0.34)
48	49.0	0.55	(1.25)	95.8	0.66	(0.70)	231.5	0.52	(0.23)	357.0	0.38	(0.11)
49	48.6	0.34	(0.67)	95.3	0.17	(0.18)	231.4	0.90	(0.38)	357.0	0.90	(0.26)
50	48.3	0.28	(0.63)	95.2	0.66	(0.70)	230.8	0.45	(0.19)	356.6	1.24	(0.35)

COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD
(CONTINUED)
TABLE 3-11: SUMMARY OF FACILITY/FIRM BANKRUPTCY STATUS BY YEAR AND BY NET WORTH FOR NON-GOVERNMENT OWNED FACILITIES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	FIRM NET WORTH IN 1982 DOLLARS											
	LESS THAN 10 MILLION			10 TO 100 MILLION			100 TO 1000 MILLION			GREATER THAN 1000 MILLION		
	SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES	
YEAR	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)
51	48.1	0.38	(0.76)	94.7	0.31	(0.32)	230.6	0.59	(0.25)	355.8	0.55	(0.15)
52	47.9	0.62	(1.35)	94.7	0.55	(0.58)	230.5	0.79	(0.34)	356.1	0.31	(0.09)
53	47.4	0.45	(0.96)	94.4	0.55	(0.62)	230.6	0.48	(0.21)	356.9	0.69	(0.19)
54	47.1	0.59	(1.30)	94.5	0.45	(0.49)	231.3	0.52	(0.22)	357.4	0.41	(0.12)
55	46.8	0.34	(0.79)	94.5	0.59	(0.61)	231.7	1.10	(0.46)	358.1	1.14	(0.32)
56	46.6	0.31	(0.70)	94.4	0.41	(0.42)	231.6	0.66	(0.29)	358.4	1.38	(0.38)
57	46.6	0.34	(0.74)	94.6	0.62	(0.68)	232.2	0.34	(0.15)	358.7	1.00	(0.27)
58	46.5	0.45	(1.08)	94.4	0.38	(0.39)	233.0	0.52	(0.23)	359.3	0.48	(0.14)
59	46.2	0.52	(1.05)	94.6	0.38	(0.39)	233.5	0.41	(0.18)	360.0	0.34	(0.09)
60	45.9	0.31	(0.69)	94.6	0.31	(0.34)	233.9	0.48	(0.20)	360.9	0.52	(0.14)
61	45.7	0.38	(0.82)	94.5	0.52	(0.56)	234.2	0.62	(0.27)	362.1	0.90	(0.24)
62	45.4	0.38	(0.77)	94.3	0.34	(0.36)	234.3	0.38	(0.16)	362.8	0.90	(0.24)
63	45.1	0.34	(0.80)	94.7	0.38	(0.42)	234.5	0.83	(0.35)	363.2	0.79	(0.21)
64	44.9	0.31	(0.64)	94.7	0.24	(0.26)	234.3	0.28	(0.12)	363.8	1.14	(0.31)
65	45.0	0.28	(0.69)	94.9	0.59	(0.64)	234.9	0.41	(0.17)	363.9	0.48	(0.13)
66	44.9	0.55	(1.33)	94.6	0.45	(0.47)	235.0	1.21	(0.52)	364.5	1.14	(0.32)
67	44.6	0.31	(0.70)	94.4	0.31	(0.34)	234.7	0.62	(0.26)	364.6	0.79	(0.22)
68	44.4	0.24	(0.59)	94.7	0.17	(0.18)	234.8	0.41	(0.17)	364.8	1.17	(0.31)
69	44.3	0.52	(1.20)	94.8	0.45	(0.45)	234.9	0.79	(0.33)	364.9	1.00	(0.27)
70	43.9	0.31	(0.77)	94.7	0.31	(0.32)	234.6	0.76	(0.33)	365.1	0.59	(0.16)
71	43.8	0.45	(0.93)	95.0	0.31	(0.32)	234.7	0.24	(0.10)	365.5	1.38	(0.39)
72	43.5	0.14	(0.30)	94.8	0.48	(0.49)	235.1	0.48	(0.21)	365.1	0.45	(0.12)
73	43.6	0.45	(1.09)	94.7	0.55	(0.58)	235.4	0.48	(0.20)	366.2	1.00	(0.28)
74	43.3	0.21	(0.49)	94.5	0.55	(0.56)	235.5	0.69	(0.28)	365.9	0.62	(0.17)
75	43.2	0.28	(0.65)	94.2	0.45	(0.46)	235.2	0.59	(0.25)	366.2	0.41	(0.11)
76	43.1	0.38	(0.90)	94.0	0.69	(0.74)	235.5	0.48	(0.20)	366.7	0.62	(0.17)
77	42.9	0.31	(0.85)	93.7	0.59	(0.63)	235.6	0.79	(0.32)	366.8	0.97	(0.26)
78	42.7	0.34	(0.82)	93.2	0.14	(0.16)	235.4	0.31	(0.13)	366.5	0.72	(0.19)
79	42.5	0.31	(0.70)	93.3	0.17	(0.18)	235.9	0.31	(0.13)	366.7	0.62	(0.17)
80	42.3	0.17	(0.44)	93.3	0.62	(0.68)	236.1	0.86	(0.35)	366.8	0.48	(0.14)
81	42.2	0.21	(0.50)	92.8	0.17	(0.19)	235.7	0.21	(0.09)	367.2	0.69	(0.19)
82	42.1	0.17	(0.41)	92.9	0.38	(0.39)	236.1	0.59	(0.24)	367.3	1.38	(0.36)
83	42.0	0.17	(0.45)	92.8	0.41	(0.47)	236.1	0.55	(0.23)	366.9	1.07	(0.29)
84	41.9	0.14	(0.34)	93.0	0.24	(0.27)	236.0	0.45	(0.19)	366.5	1.00	(0.26)
85	41.9	0.21	(0.58)	92.8	0.31	(0.33)	236.2	0.76	(0.33)	366.5	0.86	(0.23)
86	41.8	0.21	(0.52)	92.6	0.45	(0.51)	236.1	0.93	(0.39)	366.5	0.72	(0.19)
87	41.7	0.28	(0.63)	92.6	0.34	(0.36)	235.6	0.66	(0.28)	366.6	1.03	(0.28)
88	41.6	0.24	(0.59)	92.5	0.31	(0.36)	235.5	0.34	(0.14)	366.5	1.07	(0.28)
89	41.5	0.14	(0.33)	92.5	0.31	(0.34)	235.8	0.86	(0.36)	366.2	0.66	(0.18)
90	41.6	0.41	(1.02)	92.5	0.21	(0.23)	235.2	0.38	(0.16)	366.4	1.07	(0.30)
91	41.2	0.24	(0.60)	92.6	0.52	(0.55)	235.4	0.62	(0.25)	366.3	0.76	(0.21)
92	41.2	0.24	(0.61)	92.4	0.28	(0.29)	235.2	0.55	(0.24)	366.3	1.38	(0.38)
93	41.2	0.14	(0.35)	92.3	0.31	(0.35)	235.0	0.79	(0.34)	365.5	1.10	(0.29)
94	41.1	0.34	(0.78)	92.3	0.17	(0.18)	235.0	0.52	(0.23)	365.2	0.72	(0.20)
95	41.0	0.14	(0.31)	92.4	0.34	(0.38)	234.9	0.93	(0.38)	365.2	1.66	(0.46)
96	41.0	0.21	(0.49)	92.4	0.28	(0.30)	234.6	0.48	(0.20)	364.7	0.83	(0.22)
97	40.9	0.10	(0.24)	92.3	0.45	(0.50)	234.6	0.48	(0.20)	364.9	0.66	(0.18)
98	40.9	0.41	(1.17)	92.1	0.41	(0.45)	234.6	0.72	(0.31)	365.0	0.52	(0.13)
99	40.6	0.07	(0.11)	91.9	0.45	(0.50)	234.3	0.52	(0.22)	365.1	1.41	(0.39)
100	40.7	0.76	(1.71)	91.8	0.59	(0.65)	234.4	0.59	(0.24)	364.6	1.10	(0.31)

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COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE  3-12: AVERAGE OCCURRENCE OF RELEASES FOLLOWING YEAR FACILITY OPENS
VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

DETECTION OF RELEASES AT EXISTING FACILITIES:
----------------------------------------------
                                  WITHIN 50 YEARS AFTER OPENING       WITHIN 75 YEARS AFTER OPENING
                                  ------------------------------      ------------------------------
                                  PROPORTION      YEARS               PROPORTION      YEARS
                                  WITH RELEASE    AFTER OPENING       WITH RELEASE    AFTER OPENING
RELEASE TYPE                      MEAN (STD.ERR)  MEAN (STD.ERR)      MEAN (STD.ERR)  MEAN (STD.ERR)
------------                      ------------------------------      ------------------------------
INDICATING PARAMETERS ON-SITE:     0.45 ( 0.00 )   4.7 (  0.1 )        0.47 ( 0.00 )   6.5 (  0.1 )
DETECTABLE  CONC. ON-SITE    :     0.41 ( 0.00 )   7.4 (  0.1 )        0.44 ( 0.00 )   9.8 (  0.1 )
TOXIC CONC. ON-SITE          :     0.31 ( 0.00 )   7.4 (  0.1 )        0.34 ( 0.00 )  10.1 (  0.2 )
TASTE/ODOR  OFF-SITE         :     0.08 ( 0.00 )  24.9 (  0.3 )        0.10 ( 0.00 )  30.1 (  0.3 )
DETECTABLE CONC. OFF-SITE    :     0.15 ( 0.00 )  22.9 (  0.2 )        0.18 ( 0.00 )  27.4 (  0.3 )
TOXIC CONC. OFF-SITE         :     0.12 ( 0.00 )  22.4 (  0.3 )        0.14 ( 0.00 )  26.6 (  0.3 )
BATHTUB EFFECT               :     0.0  ( 0.0  )   0.0 (  0.0 )        0.0  ( 0.0  )   0.0 (  0.0 )

DETECTION OF RELEASES AT NEW FACILITIES:
-----------------------------------------
                                  WITHIN 50 YEARS AFTER OPENING       WITHIN 75 YEARS AFTER OPENING
                                  ------------------------------      ------------------------------
                                  PROPORTION      YEARS               PROPORTION      YEARS
                                  WITH RELEASE    AFTER OPENING       WITH RELEASE    AFTER OPENING
RELEASE TYPE                      MEAN (STD.ERR)  MEAN (STD.ERR)      MEAN (STD.ERR)  MEAN (STD.ERR)
------------                      ------------------------------      ------------------------------
INDICATING PARAMETERS ON-SITE:     0.04 ( 0.00 )  35.4 (  1.3 )        0.07 ( 0.00 )  51.5 (  1.3 )
DETECTABLE  CONC. ON-SITE    :     0.0  ( 0.0  )   0.0 (  0.0 )        0.0  ( 0.0  )   0.0 (  0.0 )
TOXIC CONC. ON-SITE          :     0.00 ( 0.00 )  22.0 (  0.0 )        0.00 ( 0.00 )  41.0 ( 19.0 )
TASTE/ODOR  OFF-SITE         :     0.0  ( 0.0  )   0.0 (  0.0 )        0.00 ( 0.00 )  73.0 (  0.0 )
DETECTABLE CONC. OFF-SITE    :     0.0  ( 0.0  )   0.0 (  0.0 )        0.0  ( 0.0  )   0.0 (  0.0 )
TOXIC CONC. OFF-SITE         :     0.0  ( 0.0  )   0.0 (  0.0 )        0.0  ( 0.0  )   0.0 (  0.0 )
BATHTUB EFFECT               :     0.0  ( 0.0  )   0.0 (  0.0 )        0.0  ( 0.0  )   0.0 (  0.0 )

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COVERAGE OF CORRECTIVE ACTION DURING POST-CLOSURE PERIOD

TABLE 3-13A: CAPITAL AND O&M COSTS: (THOUSANDS OF 1982 DOLLARS)
STATISTICS ARE FOR OBSERVATIONS GENERATED FOR 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

ACTION		OBSERVATIONS	MINIMUM	MEAN	MAXIMUM	FRACTION OF TIMES UNABLE TO ALLOCATE COST
MONITORING:						
INDICATING PARAMETERS ON-SITE	K:	0	0.0	0.0	0.0	
	O&M:	37325	2.7	4.6	6.5	0.1730
CONSTITUENTS ON-SITE	K:	0	0.0	0.0	0.0	
	O&M:	18170	3.4	5.5	8.3	0.3554
PLUME DELIN. & TRACKING ON-SITE	K:	0	0.0	0.0	0.0	
	O&M:	0	0.0	0.0	0.0	0.0
CONSTITUENTS OFF-SITE	K:	12525	25.0	37.6	50.0	
	O&M:	12939	1.8	2.4	3.0	0.0
PLUME DELIN. & TRACKING OFF-SITE	K:	0	0.0	0.0	0.0	
	O&M:	0	0.0	0.0	0.0	0.0
RESPONSE:						
SURFACE SEALING	K:	12606	6.5	276.6	18920.3	
	O&M:	0	0.0	0.0	0.0	0.0
FLUID REMOVAL & TREATMT ON-SITE	K:	12606	41.3	137.3	3837.1	
	O&M:	12606	33.0	122.4	5046.8	0.0
FLUID REMOVAL & TREATMT OFF-SITE	K:	4803	0.0	248.2	3687.2	
	O&M:	4835	0.0	255.2	4872.6	0.0
ROUTINE CARE:						
POST-CLOSURE CARE	K:	0	0.0	0.0	0.0	
	O&M:	27283	0.5	7.9	124.8	0.3578

TABLE 3-13B: GENERATED CLAIMS (THOUSANDS OF 1982 DOLLARS)
STATISTICS ARE FOR OBSERVATIONS GENERATED FOR 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

CLAIMS:	OBSERVATIONS	MINIMUM	MEAN	MAXIMUM	FRACTION OF GENERATED CLIAMS NOT LEGALLY VALID	FRACTION OF VALID CLAIMS NOT COMPENSATED
PERSONAL INJURY:	2165	4.0	281245.1	10579005.0	0.1706	0.1976
REAL PROPERTY:	5363	0.1	1511.5	152721.5	0.2557	0.1189
ECONOMIC LOSS:	2864	60.0	5900.5	45265.0	0.2510	0.1802
NATURAL RESOURCE DAMAGE:	3694	606.7	606.5	606.7	0.0	0.0

GRAPH 4-1

UNOBLIGATED FUND BALANCE IN MILLIONS OF CURRENT DOLLARS
FOR SIMULATION 4:
ELIMINATION OF THIRD-PARTY CLAIMS

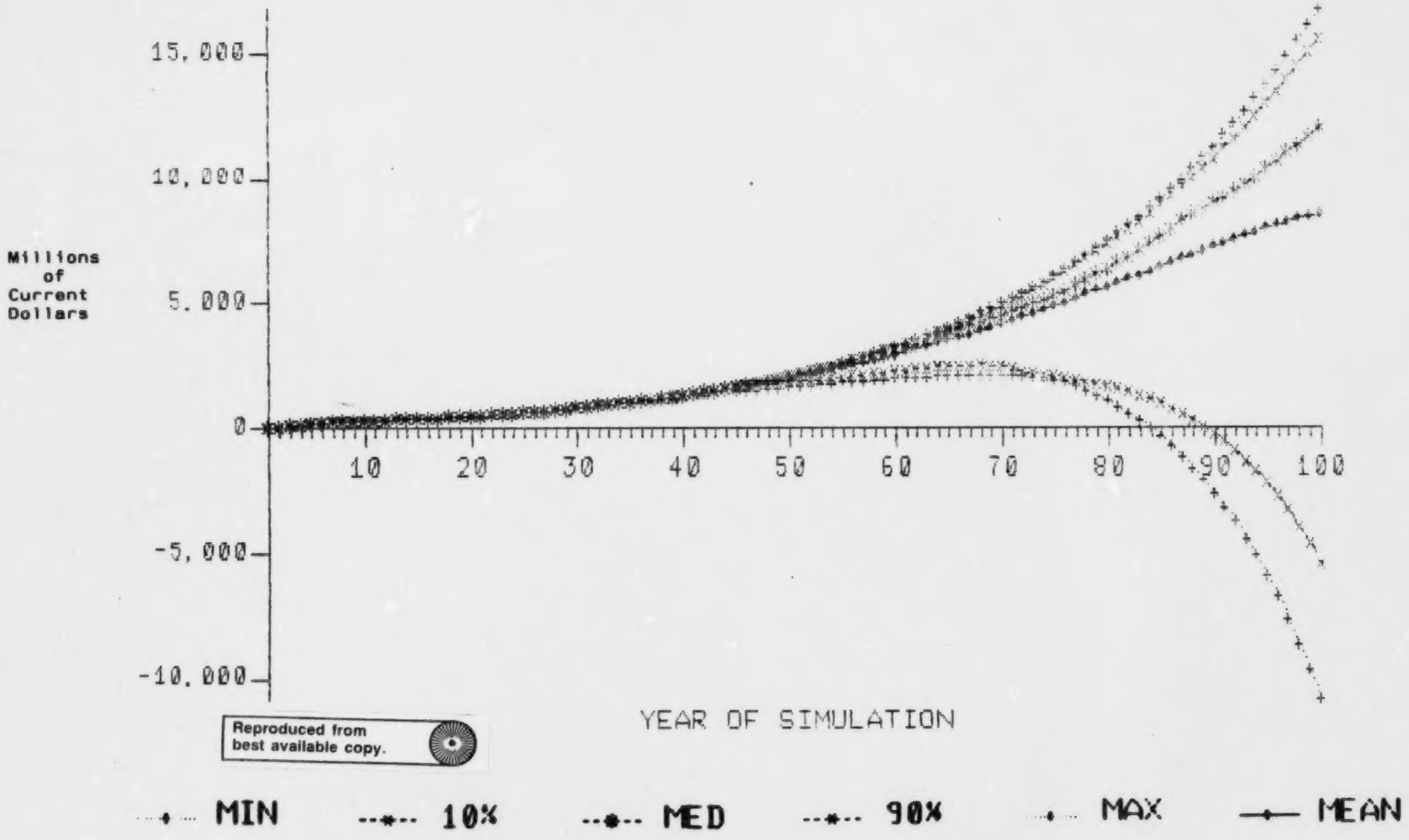

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TABLE 4- 1: SUMMARY OF FACILITY POPULATION BY YEAR, PERMIT STATUS, AND QUALIFICATION STATUS
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	OPERATING FACILITIES		CLOSED FACILITIES						
			PERMITTED			NON-PERMITTED			DECONTAMINATED
YEAR	EXISTING	NEW	QUALIFICATION STATUS PENDING	QUALIFIED	UNQUALIFIED	QUALIFICATION STATUS PENDING	QUALIFIED	UNQUALIFIED	
1	939	0	1	0	0	0	0	36	7
2	852	0	7	0	0	0	0	105	19
3	773	0	17	0	0	0	0	163	30
4	685	0	41	0	0	0	0	213	43
5	605	0	67	0	0	0	0	255	55
6	574	4	92	1	0	0	0	255	61
7	547	9	108	3	4	0	0	255	66
8	526	17	116	7	10	0	0	255	70
9	505	25	108	15	26	0	0	255	74
10	487	33	97	24	44	0	0	255	77
11	468	39	86	32	60	0	0	255	81
12	450	45	79	41	74	0	0	255	85
13	433	52	76	49	84	0	0	255	87
14	418	58	71	57	93	0	0	255	90
15	400	63	72	64	100	0	0	255	93
16	386	69	68	71	108	0	0	255	96
17	372	74	65	78	116	0	0	255	98
18	359	78	63	85	123	0	0	255	100
19	347	82	60	91	130	0	0	255	103
20	334	85	56	98	138	0	0	255	105
21	322	88	55	103	144	0	0	255	107
22	310	91	52	109	151	0	0	255	109
23	301	93	49	114	157	0	0	255	111
24	290	95	48	119	162	0	0	255	113
25	280	97	46	124	168	0	0	255	114
26	271	99	43	128	175	0	0	255	116
27	261	101	43	132	180	0	0	255	118
28	252	102	43	135	185	0	0	255	119
29	244	103	41	140	190	0	0	255	120
30	235	104	39	144	195	0	0	255	122
31	228	104	39	147	199	0	0	255	123
32	220	105	38	151	204	0	0	255	125
33	212	106	36	154	208	0	0	255	126
34	205	106	36	158	212	0	0	255	127
35	197	106	36	161	216	0	0	255	129
36	191	106	35	165	220	0	0	255	131
37	185	105	34	168	224	0	0	255	132
38	180	105	33	171	228	0	0	255	133
39	174	104	32	174	232	0	0	255	134
40	169	104	30	178	235	0	0	255	136
41	164	104	29	181	238	0	0	255	137
42	157	103	30	185	241	0	0	255	138
43	151	102	30	188	244	0	0	255	139
44	146	102	30	191	247	0	0	255	141
45	141	101	31	194	250	0	0	255	141
46	137	100	31	196	253	0	0	255	142
47	133	99	29	200	256	0	0	255	143
48	129	98	28	203	259	0	0	255	144
49	124	97	27	207	262	0	0	255	145
50	121	96	26	210	264	0	0	255	146

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE
(CONTINUED)
TABLE 4- 1: SUMMARY OF FACILITY POPULATION BY YEAR, PERMIT STATUS, AND QUALIFICATION STATUS
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	OPERATING FACILITIES		CLOSED FACILITIES						
			PERMITTED			NON-PERMITTED			DECONTAMINATED
YEAR	EXISTING	NEW	QUALIFICATION STATUS PENDING	QUALIFIED	UNQUALIFIED	QUALIFICATION STATUS PENDING	QUALIFIED	UNQUALIFIED	
51	117	96	26	214	266	0	0	255	147
52	113	98	25	217	268	0	0	255	148
53	109	99	25	220	270	0	0	255	149
54	106	100	24	223	272	0	0	255	150
55	103	100	25	226	274	0	0	255	150
56	99	103	24	229	277	0	0	255	151
57	97	103	24	232	279	0	0	255	152
58	95	104	23	235	281	0	0	255	153
59	92	105	22	238	282	0	0	255	153
60	90	106	21	241	285	0	0	255	154
61	87	106	21	243	286	0	0	255	154
62	85	107	21	246	288	0	0	255	155
63	82	108	21	248	290	0	0	255	155
64	80	108	21	251	291	0	0	255	156
65	78	108	21	253	293	0	0	255	156
66	76	108	20	256	295	0	0	255	157
67	74	109	19	259	296	0	0	255	157
68	72	110	18	261	298	0	0	255	158
69	69	110	19	264	299	0	0	255	159
70	67	111	18	266	301	0	0	255	159
71	65	111	18	269	302	0	0	255	160
72	64	111	18	271	303	0	0	255	160
73	62	111	18	273	305	0	0	255	160
74	61	111	16	276	306	0	0	255	161
75	60	111	16	278	308	0	0	255	161
76	59	111	14	280	309	0	0	255	162
77	57	111	14	282	310	0	0	255	162
78	55	111	15	284	311	0	0	255	163
79	54	112	15	286	312	0	0	255	163
80	53	112	15	288	313	0	0	255	163
81	51	111	15	289	314	0	0	255	164
82	50	111	15	292	315	0	0	255	164
83	49	111	14	294	317	0	0	255	165
84	47	111	15	295	318	0	0	255	165
85	46	111	15	297	318	0	0	255	166
86	45	111	14	299	320	0	0	255	166
87	44	110	14	301	321	0	0	255	166
88	43	110	14	303	321	0	0	255	167
89	42	109	14	305	322	0	0	255	167
90	41	109	14	307	323	0	0	255	167
91	40	109	14	309	325	0	0	255	168
92	39	108	14	311	325	0	0	255	168
93	38	108	14	313	326	0	0	255	169
94	37	106	16	315	327	0	0	255	169
95	36	107	16	317	328	0	0	255	169
96	35	107	15	319	329	0	0	255	170
97	34	106	15	321	329	0	0	255	170
98	34	105	15	322	331	0	0	255	170
99	33	105	13	325	332	0	0	255	171
100	32	104	13	327	333	0	0	255	171

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE

TABLE 4- 2: SUMMARY PCLTF FINANCIAL STATISTICS
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	UNOBLIGATED BALANCE	BALANCE	NON-INTEREST EXPENDITURES	INTEREST PAYMENTS	TAX REVENUE	INTEREST REVENUE
1	0.0	0.0	0.0	0.0	37.56	1.12
2	38.69	38.69	0.0	0.0	36.62	4.70
3	80.01	80.01	0.0	0.0	35.89	9.33
4	125.23	125.23	0.0	0.0	35.17	12.72
5	173.12	173.12	0.0	0.0	34.47	15.48
6	223.07	223.07	0.0	0.0	8.57	17.09
7	248.73	248.73	0.0	0.0	0.0	16.35
8	265.09	265.09	0.0	0.0	0.0	15.11
9	280.20	280.20	0.0	0.0	0.0	15.63
10	295.83	295.83	0.0	0.0	0.0	16.15
11	311.98	311.98	0.0	0.0	0.0	16.66
12	328.64	328.64	0.0	0.0	0.0	17.16
13	345.80	345.80	0.0	0.0	0.0	17.64
14	363.43	363.43	0.0	0.0	0.0	18.53
15	381.97	381.97	0.0	0.0	0.0	19.48
16	401.45	401.45	0.0	0.0	0.0	20.47
17	421.92	421.92	0.0	0.0	0.0	21.52
18	443.44	443.44	0.0	0.0	0.0	22.62
19	466.05	466.05	0.0	0.0	0.0	23.77
20	489.82	489.82	0.0	0.0	0.0	24.98
21	514.80	514.80	0.0	0.0	0.0	26.25
22	541.05	541.05	0.0	0.0	0.0	27.59
23	568.65	568.65	0.0	0.0	0.0	29.00
24	597.65	597.65	0.0	0.0	0.0	30.48
25	628.13	628.13	0.0	0.0	0.0	32.03
26	660.16	660.16	0.0	0.0	0.0	33.67
27	693.83	693.83	0.0	0.0	0.0	35.39
28	729.21	729.21	0.0	0.0	0.0	37.19
29	766.40	766.40	0.0	0.0	0.0	39.09
30	805.49	805.49	0.0	0.0	0.0	41.08
31	846.57	846.57	0.02	0.0	0.0	43.17
32	889.72	889.72	0.13	0.0	0.0	45.37
33	934.92	934.97	0.30	0.0	0.0	47.68
34	982.21	982.35	0.72	0.0	0.0	50.09
35	1031.35	1031.71	1.18	0.0	0.0	52.59
36	1082.44	1083.12	1.58	0.0	0.0	55.21
37	1135.66	1136.75	2.81	0.0	0.0	57.92
38	1190.12	1191.86	2.69	0.0	0.0	60.73
39	1247.68	1249.90	3.57	0.0	0.0	63.68
40	1307.15	1310.01	4.05	0.0	0.0	66.73
41	1369.45	1372.68	5.09	0.0	0.0	69.91
42	1433.51	1437.50	6.37	0.0	0.0	73.19
43	1499.45	1504.32	9.31	0.0	0.0	76.54
44	1565.05	1571.55	9.28	0.0	0.0	79.97
45	1634.41	1642.24	10.64	0.0	0.0	83.55
46	1705.95	1715.15	12.44	0.0	0.0	87.24
47	1779.78	1789.95	13.52	0.0	0.0	91.03
48	1855.95	1867.46	16.17	0.0	0.0	94.93
49	1932.99	1946.23	16.51	0.0	0.0	98.94
50	2014.13	2028.66	22.06	0.0	0.0	103.04

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE
(CONTINUED)
TABLE 4- 2: SUMMARY PCLTF FINANCIAL STATISTICS
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	UNOBLIGATED BALANCE	BALANCE	NON-INTEREST EXPENDITURES	INTEREST PAYMENTS	TAX REVENUE	INTEREST REVENUE
51	2092.46	2109.65	20.65	0.0	0.0	107.20
52	2177.58	2196.20	21.73	0.0	0.0	111.59
53	2265.74	2286.06	22.08	0.0	0.0	116.17
54	2359.85	2380.15	23.18	0.0	0.0	120.95
55	2456.82	2477.93	25.05	0.0	0.0	125.90
56	2556.65	2578.78	28.53	0.0	0.0	130.98
57	2657.09	2681.22	30.02	0.0	0.0	136.17
58	2761.08	2787.38	31.77	0.0	0.0	141.55
59	2868.72	2897.16	33.35	0.0	0.0	147.12
60	2980.98	3010.94	34.72	0.0	0.0	152.90
61	3097.67	3129.12	35.12	0.0	0.0	158.92
62	3220.40	3252.92	41.49	0.0	0.0	165.11
63	3341.51	3376.54	48.89	0.0	0.0	171.28
64	3459.52	3498.93	56.78	0.0	0.0	177.37
65	3573.30	3619.51	65.39	0.0	0.0	183.36
66	3683.74	3737.47	62.55	0.0	0.0	189.43
67	3806.17	3864.35	65.86	0.0	0.0	195.83
68	3933.21	3994.31	67.49	0.0	0.0	202.43
69	4067.53	4129.24	68.08	0.0	0.0	209.30
70	4206.96	4270.44	74.28	0.0	0.0	216.39
71	4346.44	4412.53	76.95	0.0	0.0	223.58
72	4490.10	4559.15	83.91	0.0	0.0	230.93
73	4632.13	4706.15	87.09	0.0	0.0	238.37
74	4779.35	4857.42	93.33	0.0	0.0	245.96
75	4926.80	5010.04	97.39	0.0	0.0	253.67
76	5078.84	5166.30	103.40	0.0	0.0	261.52
77	5231.79	5324.42	107.76	0.0	0.0	269.50
78	5388.99	5486.15	113.53	0.0	0.0	277.64
79	5548.00	5650.27	124.79	0.0	0.0	285.80
80	5702.35	5811.25	130.56	0.0	0.0	293.90
81	5858.48	5974.58	137.65	0.0	0.0	302.10
82	6015.26	6139.02	143.32	0.0	0.0	310.38
83	6176.46	6306.06	150.89	0.0	0.0	318.75
84	6337.90	6473.91	154.89	0.0	0.36	327.24
85	6505.15	6646.62	163.57	-0.31	0.49	336.20
86	6671.57	6819.41	176.11	-0.96	0.49	345.43
87	6832.57	6988.24	187.81	-1.67	0.49	354.52
88	6987.74	7153.77	198.89	-2.44	0.85	363.53
89	7139.62	7316.80	206.34	-3.63	1.34	372.90
90	7294.30	7481.07	215.71	-5.21	1.82	382.70
91	7449.06	7644.66	226.29	-7.57	1.94	393.20
92	7601.75	7805.93	238.07	-10.59	1.94	404.22
93	7749.26	7963.42	249.71	-13.83	2.31	415.27
94	7892.60	8117.46	259.36	-17.67	2.43	426.80
95	8034.32	8269.64	272.53	-22.32	2.43	438.96
96	8170.02	8416.18	299.50	-27.36	2.43	450.96
97	8281.05	8542.71	300.25	-32.91	2.43	462.95
98	8400.21	8674.92	327.32	-39.28	2.43	475.55
99	8494.30	8786.29	337.62	-46.48	2.43	488.24
100	8588.97	8892.84	352.10	-54.26	2.43	501.17

TABLE 4- 3: SUMMARY OF PCLTF BALANCE
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	FUND BALANCE					UNOBLIGATED FUND BALANCE				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
1	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
2	38.69	38.69	(0.0)	38.69	38.69	38.69	38.69	(0.0)	38.69	38.69
3	80.01	80.01	(0.0)	80.01	80.01	80.01	80.01	(0.0)	80.01	80.01
4	125.23	125.23	(0.0)	125.23	125.23	125.23	125.23	(0.0)	125.23	125.23
5	173.12	173.12	(0.0)	173.12	173.12	173.12	173.12	(0.0)	173.12	173.12
6	223.07	223.07	(0.0)	223.07	223.07	223.07	223.07	(0.0)	223.07	223.07
7	248.73	248.73	(0.0)	248.73	248.73	248.73	248.73	(0.0)	248.73	248.73
8	265.09	265.09	(0.0)	265.09	265.09	265.09	265.09	(0.0)	265.09	265.09
9	280.20	280.20	(0.0)	280.20	280.20	280.20	280.20	(0.0)	280.20	280.20
10	295.83	295.83	(0.0)	295.83	295.83	295.83	295.83	(0.0)	295.83	295.83
11	311.98	311.98	(0.0)	311.98	311.98	311.98	311.98	(0.0)	311.98	311.98
12	328.64	328.64	(0.0)	328.64	328.64	328.64	328.64	(0.0)	328.64	328.64
13	345.80	345.80	(0.0)	345.80	345.80	345.80	345.80	(0.0)	345.80	345.80
14	363.43	363.43	(0.0)	363.43	363.43	363.43	363.43	(0.0)	363.43	363.43
15	381.97	381.97	(0.0)	381.97	381.97	381.97	381.97	(0.0)	381.97	381.97
16	401.45	401.45	(0.0)	401.45	401.45	401.45	401.45	(0.0)	401.45	401.45
17	421.92	421.92	(0.0)	421.92	421.92	421.92	421.92	(0.0)	421.92	421.92
18	443.44	443.44	(0.0)	443.44	443.44	443.44	443.44	(0.0)	443.44	443.44
19	466.05	466.05	(0.0)	466.05	466.05	466.05	466.05	(0.0)	466.05	466.05
20	489.82	489.82	(0.0)	489.82	489.82	489.82	489.82	(0.0)	489.82	489.82
21	514.80	514.80	(0.0)	514.80	514.80	514.80	514.80	(0.0)	514.80	514.80
22	541.05	541.05	(0.0)	541.05	541.05	541.05	541.05	(0.0)	541.05	541.05
23	568.65	568.65	(0.0)	568.65	568.65	568.65	568.65	(0.0)	568.65	568.65
24	597.65	597.65	(0.0)	597.65	597.65	597.65	597.65	(0.0)	597.65	597.65
25	628.13	628.13	(0.0)	628.13	628.13	628.13	628.13	(0.0)	628.13	628.13
26	660.16	660.16	(0.0)	660.16	660.16	660.16	660.16	(0.0)	660.16	660.16
27	693.83	693.83	(0.0)	693.83	693.83	693.83	693.83	(0.0)	693.83	693.83
28	729.21	729.21	(0.0)	729.21	729.21	729.21	729.21	(0.0)	729.21	729.21
29	766.40	766.40	(0.0)	766.40	766.40	766.40	766.40	(0.0)	766.40	766.40
30	805.49	805.49	(0.0)	805.49	805.49	805.49	805.49	(0.0)	805.49	805.49
31	846.57	846.57	(0.0)	846.57	846.57	846.57	846.57	(0.0)	846.57	846.57
32	889.67	889.72	(0.0)	889.74	889.74	889.65	889.72	(0.0)	889.74	889.74
33	934.73	934.97	(0.0)	935.01	935.12	934.62	934.92	(0.0)	934.98	935.12
34	981.99	982.35	(0.1)	982.38	982.70	981.75	982.21	(0.1)	982.26	982.67
35	1030.97	1031.71	(0.1)	1031.77	1032.51	1030.43	1031.35	(0.1)	1031.43	1032.38
36	1081.91	1083.12	(0.2)	1083.40	1084.56	1080.89	1082.44	(0.3)	1082.76	1084.25
37	1134.49	1136.75	(0.3)	1137.04	1138.96	1132.67	1135.66	(0.4)	1135.98	1138.41
38	1189.14	1191.86	(1.1)	1192.84	1195.74	1186.75	1190.12	(1.4)	1191.64	1194.87
39	1245.95	1249.90	(1.3)	1251.13	1255.02	1242.94	1247.68	(1.7)	1249.10	1253.85
40	1305.28	1310.01	(1.6)	1311.42	1316.70	1301.80	1307.15	(1.9)	1308.87	1315.05
41	1365.03	1372.68	(1.8)	1374.14	1381.14	1360.25	1369.45	(2.0)	1371.30	1379.13
42	1428.52	1437.50	(2.2)	1438.88	1448.58	1422.07	1433.51	(2.4)	1435.24	1446.19
43	1488.83	1504.32	(2.6)	1506.64	1518.06	1480.64	1499.45	(2.8)	1502.23	1514.83
44	1549.82	1571.55	(3.5)	1577.55	1589.35	1538.87	1565.05	(4.1)	1572.24	1585.57
45	1614.70	1642.24	(5.0)	1651.67	1665.11	1600.53	1634.41	(6.2)	1646.14	1660.62
46	1679.84	1715.15	(7.0)	1728.70	1744.26	1662.01	1705.95	(8.7)	1722.49	1740.21
47	1744.26	1789.95	(9.1)	1805.01	1827.40	1725.52	1779.78	(10.8)	1798.62	1822.81
48	1813.22	1867.46	(11.5)	1889.11	1911.72	1799.08	1855.95	(13.3)	1882.19	1905.74
49	1884.81	1946.23	(13.7)	1974.71	2000.20	1864.14	1932.99	(15.5)	1964.35	1992.90
50	1954.44	2028.66	(16.1)	2059.46	2092.01	1920.21	2014.13	(17.9)	2044.56	2083.34

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE
(CONTINUED)
TABLE 4- 3: SUMMARY OF PCLTF BALANCE
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	FUND BALANCE					UNOBLIGATED FUND BALANCE				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
51	2012.93	2109.65	(19.1)	2145.91	2186.15	1967.51	2092.46	(21.1)	2129.78	2178.32
52	2040.26	2196.20	(22.3)	2239.99	2286.41	1969.77	2177.58	(24.6)	2224.03	2277.38
53	2060.79	2286.06	(26.0)	2338.09	2392.08	1966.62	2265.74	(28.7)	2322.56	2382.46
54	2078.97	2380.15	(29.8)	2440.23	2502.56	2001.92	2359.85	(32.3)	2425.21	2492.37
55	2093.38	2477.93	(34.0)	2546.15	2618.21	2029.76	2456.82	(36.5)	2530.15	2607.57
56	2139.03	2578.78	(38.0)	2643.08	2739.17	2082.87	2556.65	(40.3)	2616.48	2728.02
57	2184.49	2681.22	(42.5)	2746.23	2863.21	2129.56	2657.09	(44.9)	2729.94	2847.86
58	2230.93	2787.38	(47.4)	2866.51	2990.51	2175.31	2761.08	(49.8)	2849.44	2973.79
59	2281.77	2897.16	(52.7)	2992.43	3122.46	2224.37	2868.72	(55.3)	2974.45	3104.27
60	2331.50	3010.94	(58.4)	3123.95	3258.96	2272.03	2980.98	(61.2)	3105.05	3239.82
61	2380.74	3129.12	(64.6)	3260.68	3398.00	2319.17	3097.67	(67.5)	3240.92	3376.27
62	2429.25	3252.92	(71.0)	3402.85	3544.02	2364.58	3220.40	(74.0)	3379.78	3520.18
63	2476.97	3376.54	(78.6)	3549.27	3696.09	2409.36	3341.51	(81.8)	3521.73	3670.39
64	2523.83	3498.93	(86.2)	3691.37	3851.37	2453.19	3459.52	(89.7)	3629.99	3823.85
65	2546.74	3619.51	(95.1)	3803.95	4002.68	2466.19	3573.30	(99.2)	3773.79	3970.38
66	2577.37	3737.47	(107.8)	3960.74	4169.62	2489.56	3683.74	(113.3)	3928.33	4146.41
67	2604.64	3864.35	(118.6)	4123.48	4353.81	2508.93	3806.17	(124.6)	4088.82	4329.11
68	2628.93	3994.31	(130.3)	4283.33	4545.26	2532.50	3933.21	(136.6)	4230.51	4518.86
69	2647.16	4129.24	(143.3)	4423.14	4742.02	2521.80	4067.53	(148.9)	4361.54	4712.99
70	2629.19	4270.44	(157.0)	4568.12	4944.30	2442.17	4206.96	(162.9)	4509.83	4911.87
71	2544.15	4412.53	(171.1)	4733.09	5156.47	2348.42	4346.44	(177.1)	4688.26	5121.08
72	2445.83	4559.15	(186.4)	4920.71	5377.46	2242.50	4490.10	(192.4)	4873.34	5339.89
73	2363.96	4706.15	(202.0)	5111.36	5606.72	2169.27	4632.13	(207.9)	5060.27	5567.50
74	2271.36	4857.42	(218.7)	5270.34	5845.69	2134.76	4779.35	(224.7)	5156.78	5804.31
75	2227.35	5010.04	(236.6)	5414.72	6095.07	2092.79	4926.80	(242.8)	5340.04	6051.58
76	2180.79	5166.30	(255.9)	5602.95	6352.36	2039.42	5078.84	(262.3)	5525.58	6306.25
77	2093.41	5324.42	(276.9)	5796.45	6619.46	1936.07	5231.79	(283.8)	5735.72	6570.30
78	1996.47	5486.15	(299.4)	6020.60	6897.23	1844.03	5388.99	(306.8)	5957.00	6843.15
79	1920.12	5650.27	(323.4)	6252.32	7178.08	1770.94	5548.00	(331.2)	6185.71	7102.82
80	1842.52	5811.25	(350.7)	6491.18	7455.27	1686.58	5702.35	(359.4)	6421.11	7377.63
81	1753.41	5974.58	(380.0)	6738.61	7742.50	1590.63	5858.48	(389.7)	6664.79	7660.13
82	1640.17	6139.02	(411.2)	6994.04	8049.89	1466.80	6015.26	(421.9)	6916.22	7966.53
83	1515.45	6306.06	(444.5)	7257.84	8368.49	1331.91	6176.46	(455.6)	7176.05	8284.19
84	1364.34	6473.91	(480.3)	7529.74	8701.27	1166.78	6337.90	(491.9)	7443.42	8616.74
85	1197.99	6646.62	(517.2)	7811.03	9045.56	990.16	6505.15	(529.0)	7720.22	8957.34
86	1004.58	6819.41	(556.4)	8101.31	9402.66	782.44	6671.57	(568.4)	8005.80	9310.67
87	792.36	6988.24	(598.6)	8395.06	9773.47	559.40	6832.57	(611.0)	8293.08	9676.92
88	558.29	7153.77	(643.1)	8697.27	10151.68	313.31	6987.74	(656.0)	8588.13	10048.78
89	306.72	7316.80	(689.7)	8988.30	10540.08	53.80	7139.62	(703.0)	8823.15	10429.46
90	37.06	7481.07	(740.0)	9222.23	10941.68	-225.88	7294.30	(753.8)	9036.07	10822.57
91	-253.46	7644.66	(793.4)	9460.48	11357.18	-526.34	7449.06	(807.9)	9251.80	11231.14
92	-627.68	7805.93	(850.7)	9701.54	11787.39	-929.50	7601.75	(866.2)	9485.76	11655.27
93	-1001.51	7963.42	(910.6)	9942.94	12236.24	-1322.31	7749.26	(926.5)	9761.00	12099.02
94	-1411.02	8117.46	(974.5)	10236.11	12705.94	-1752.89	7892.60	(991.1)	10074.68	12565.01
95	-1858.27	8269.64	(1042.8)	10569.55	13191.85	-2204.03	8034.32	(1059.9)	10400.95	13046.93
96	-2345.44	8416.18	(1115.0)	10902.16	13687.73	-2706.86	8170.02	(1132.9)	10723.73	13535.36
97	-2863.43	8542.71	(1189.1)	11243.83	14203.23	-3237.33	8281.05	(1207.0)	11055.58	14042.10
98	-3512.25	8674.92	(1272.3)	11593.66	14736.84	-3985.60	8400.21	(1291.4)	11394.47	14566.76
99	-4193.58	8786.29	(1363.3)	11951.86	15288.79	-4687.96	8494.30	(1384.6)	11744.44	15111.70
100	-4930.85	8892.84	(1460.4)	12315.90	15858.85	-5448.44	8588.97	(1485.0)	12098.89	15673.39

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE

TABLE 4- 4: SUMMARY OF PCLTF TAX REVENUES, AND TOTAL MONITORING, CARE, RESPONSE, AND CLAIMS EXPENDITURES
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	TAX REVENUES					MONITORING, CARE, RESPONSE, AND CLAIMS PCLTF EXPENDITURES				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
1	37.56	37.56	(0.0)	37.56	37.56	0.0	0.0	(0.0)	0.0	0.0
2	36.62	36.62	(0.0)	36.62	36.62	0.0	0.0	(0.0)	0.0	0.0
3	35.89	35.89	(0.0)	35.89	35.89	0.0	0.0	(0.0)	0.0	0.0
4	35.17	35.17	(0.0)	35.17	35.17	0.0	0.0	(0.0)	0.0	0.0
5	34.47	34.47	(0.0)	34.47	34.47	0.0	0.0	(0.0)	0.0	0.0
6	8.57	8.57	(0.0)	8.57	8.57	0.0	0.0	(0.0)	0.0	0.0
7	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
8	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
9	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
10	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
11	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
12	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
13	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
14	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
15	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
16	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
17	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
18	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
19	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
20	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
21	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
22	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
23	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
24	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
25	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
26	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
27	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
28	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
29	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
30	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
31	0.0	0.0	(0.0)	0.0	0.0	0.0	0.02	(0.0)	0.0	0.07
32	0.0	0.0	(0.0)	0.0	0.0	0.0	0.13	(0.0)	0.11	0.29
33	0.0	0.0	(0.0)	0.0	0.0	0.10	0.30	(0.0)	0.29	0.56
34	0.0	0.0	(0.0)	0.0	0.0	0.31	0.72	(0.1)	0.64	1.18
35	0.0	0.0	(0.0)	0.0	0.0	0.58	1.18	(0.1)	1.06	1.85
36	0.0	0.0	(0.0)	0.0	0.0	0.80	1.58	(0.1)	1.57	2.65
37	0.0	0.0	(0.0)	0.0	0.0	1.22	2.81	(0.8)	2.05	3.14
38	0.0	0.0	(0.0)	0.0	0.0	1.72	2.69	(0.2)	2.59	4.00
39	0.0	0.0	(0.0)	0.0	0.0	2.05	3.57	(0.3)	3.14	6.83
40	0.0	0.0	(0.0)	0.0	0.0	2.50	4.05	(0.3)	3.68	6.61
41	0.0	0.0	(0.0)	0.0	0.0	2.94	5.09	(0.4)	4.43	8.21
42	0.0	0.0	(0.0)	0.0	0.0	3.62	6.37	(0.6)	5.26	10.77
43	0.0	0.0	(0.0)	0.0	0.0	4.01	9.31	(2.3)	5.84	14.60
44	0.0	0.0	(0.0)	0.0	0.0	4.70	9.28	(1.8)	6.51	13.96
45	0.0	0.0	(0.0)	0.0	0.0	5.21	10.64	(1.9)	7.21	19.82
46	0.0	0.0	(0.0)	0.0	0.0	5.98	12.44	(2.1)	8.23	20.85
47	0.0	0.0	(0.0)	0.0	0.0	6.98	13.52	(2.2)	10.00	27.16
48	0.0	0.0	(0.0)	0.0	0.0	8.00	16.17	(2.5)	11.52	36.05
49	0.0	0.0	(0.0)	0.0	0.0	8.71	16.51	(2.2)	11.68	38.29
50	0.0	0.0	(0.0)	0.0	0.0	9.50	22.06	(4.7)	13.70	44.62

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE
(CONTINUED)
TABLE 4- 4: SUMMARY OF PCLTF TAX REVENUES, AND TOTAL MONITORING, CARE, RESPONSE, AND CLAIMS EXPENDITURES
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	TAX REVENUES					MONITORING, CARE, RESPONSE, AND CLAIMS PCLTF EXPENDITURES				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
51	0.0	0.0	(0.0)	0.0	0.0	10.28	20.65	(3.0)	14.55	46.77
52	0.0	0.0	(0.0)	0.0	0.0	11.39	21.73	(3.1)	15.27	49.00
53	0.0	0.0	(0.0)	0.0	0.0	12.18	22.08	(2.9)	16.78	51.49
54	0.0	0.0	(0.0)	0.0	0.0	12.94	23.18	(3.1)	16.87	52.67
55	0.0	0.0	(0.0)	0.0	0.0	14.75	25.05	(2.5)	19.58	56.23
56	0.0	0.0	(0.0)	0.0	0.0	16.00	28.53	(3.3)	21.03	58.83
57	0.0	0.0	(0.0)	0.0	0.0	17.35	30.02	(3.3)	22.14	61.57
58	0.0	0.0	(0.0)	0.0	0.0	18.80	31.77	(3.4)	24.57	64.43
59	0.0	0.0	(0.0)	0.0	0.0	19.78	33.35	(3.6)	25.69	67.53
60	0.0	0.0	(0.0)	0.0	0.0	20.78	34.72	(3.6)	27.74	70.92
61	0.0	0.0	(0.0)	0.0	0.0	21.72	35.12	(3.2)	29.04	73.54
62	0.0	0.0	(0.0)	0.0	0.0	23.10	41.49	(5.5)	30.33	77.38
63	0.0	0.0	(0.0)	0.0	0.0	23.58	48.89	(6.6)	34.46	84.57
64	0.0	0.0	(0.0)	0.0	0.0	25.04	56.78	(7.2)	38.51	112.92
65	0.0	0.0	(0.0)	0.0	0.0	28.75	65.39	(10.9)	43.72	154.77
66	0.0	0.0	(0.0)	0.0	0.0	30.46	62.55	(7.4)	46.40	111.44
67	0.0	0.0	(0.0)	0.0	0.0	34.49	65.86	(7.6)	48.77	116.29
68	0.0	0.0	(0.0)	0.0	0.0	35.12	67.49	(7.4)	50.32	121.42
69	0.0	0.0	(0.0)	0.0	0.0	38.78	68.08	(7.3)	48.32	121.50
70	0.0	0.0	(0.0)	0.0	0.0	40.33	74.28	(7.2)	62.22	124.76
71	0.0	0.0	(0.0)	0.0	0.0	42.15	76.95	(7.6)	57.72	130.05
72	0.0	0.0	(0.0)	0.0	0.0	46.79	83.91	(8.0)	61.18	136.67
73	0.0	0.0	(0.0)	0.0	0.0	49.54	87.09	(8.1)	64.27	142.99
74	0.0	0.0	(0.0)	0.0	0.0	52.57	93.33	(8.5)	71.06	151.96
75	0.0	0.0	(0.0)	0.0	0.0	55.19	97.39	(8.7)	75.93	157.29
76	0.0	0.0	(0.0)	0.0	0.0	57.77	103.40	(9.3)	84.02	194.90
77	0.0	0.0	(0.0)	0.0	0.0	59.82	107.76	(9.1)	88.01	188.28
78	0.0	0.0	(0.0)	0.0	0.0	63.49	113.53	(9.5)	93.38	189.59
79	0.0	0.0	(0.0)	0.0	0.0	66.30	124.79	(11.9)	97.67	237.67
80	0.0	0.0	(0.0)	0.0	0.0	70.02	130.56	(12.3)	105.94	250.10
81	0.0	0.0	(0.0)	0.0	0.0	74.74	137.65	(12.7)	111.94	260.34
82	0.0	0.0	(0.0)	0.0	0.0	78.42	143.32	(13.1)	115.51	266.02
83	0.0	0.0	(0.0)	0.0	0.0	84.21	150.89	(13.9)	118.40	276.97
84	0.0	0.36	(0.4)	0.0	0.0	88.61	154.89	(13.1)	124.13	260.43
85	0.0	0.49	(0.5)	0.0	0.0	93.33	163.57	(13.7)	130.87	273.59
86	0.0	0.49	(0.5)	0.0	0.0	98.55	176.11	(15.8)	136.16	308.51
87	0.0	0.49	(0.5)	0.0	0.0	104.28	187.81	(16.5)	146.17	333.83
88	0.0	0.85	(0.6)	0.0	0.0	124.29	198.89	(16.3)	160.08	348.19
89	0.0	1.34	(0.8)	0.0	10.57	129.47	206.34	(17.8)	154.31	363.97
90	0.0	1.82	(0.9)	0.0	14.10	135.43	215.71	(18.4)	161.34	379.29
91	0.0	1.94	(0.9)	0.0	14.10	143.17	226.29	(18.4)	181.72	393.98
92	0.0	1.94	(0.9)	0.0	14.10	149.47	238.07	(18.4)	203.93	404.74
93	0.0	2.31	(1.0)	0.0	14.10	151.46	249.71	(19.8)	206.96	421.31
94	0.0	2.43	(1.0)	0.0	14.10	159.06	259.36	(20.3)	215.12	422.59
95	0.0	2.43	(1.0)	0.0	14.10	173.23	272.53	(20.8)	228.27	444.56
96	0.0	2.43	(1.0)	0.0	14.10	179.16	299.50	(24.8)	239.23	476.63
97	0.0	2.43	(1.0)	0.0	14.10	183.57	300.25	(24.4)	249.05	499.17
98	0.0	2.43	(1.0)	0.0	14.10	192.31	327.32	(31.3)	259.50	506.98
99	0.0	2.43	(1.0)	0.0	14.10	200.96	337.62	(32.1)	271.10	527.81
100	0.0	2.43	(1.0)	0.0	14.10	211.25	352.10	(33.5)	281.94	548.92

TABLE 4- 5: SUMMARY OF PCLTF INTEREST REVENUES AND PAYMENTS
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	INTEREST REVENUES					INTEREST PAYMENTS				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
1	1.12	1.12	(0.0)	1.12	1.12	0.0	0.0	(0.0)	0.0	0.0
2	4.70	4.70	(0.0)	4.70	4.70	0.0	0.0	(0.0)	0.0	0.0
3	9.33	9.33	(0.0)	9.33	9.33	0.0	0.0	(0.0)	0.0	0.0
4	12.72	12.72	(0.0)	12.72	12.72	0.0	0.0	(0.0)	0.0	0.0
5	15.48	15.48	(0.0)	15.48	15.48	0.0	0.0	(0.0)	0.0	0.0
6	17.09	17.09	(0.0)	17.09	17.09	0.0	0.0	(0.0)	0.0	0.0
7	16.35	16.35	(0.0)	16.35	16.35	0.0	0.0	(0.0)	0.0	0.0
8	15.11	15.11	(0.0)	15.11	15.11	0.0	0.0	(0.0)	0.0	0.0
9	15.63	15.63	(0.0)	15.63	15.63	0.0	0.0	(0.0)	0.0	0.0
10	16.15	16.15	(0.0)	16.15	16.15	0.0	0.0	(0.0)	0.0	0.0
11	16.66	16.66	(0.0)	16.66	16.66	0.0	0.0	(0.0)	0.0	0.0
12	17.16	17.16	(0.0)	17.16	17.16	0.0	0.0	(0.0)	0.0	0.0
13	17.64	17.64	(0.0)	17.64	17.64	0.0	0.0	(0.0)	0.0	0.0
14	18.53	18.53	(0.0)	18.53	18.53	0.0	0.0	(0.0)	0.0	0.0
15	19.48	19.48	(0.0)	19.48	19.48	0.0	0.0	(0.0)	0.0	0.0
16	20.47	20.47	(0.0)	20.47	20.47	0.0	0.0	(0.0)	0.0	0.0
17	21.52	21.52	(0.0)	21.52	21.52	0.0	0.0	(0.0)	0.0	0.0
18	22.62	22.62	(0.0)	22.62	22.62	0.0	0.0	(0.0)	0.0	0.0
19	23.77	23.77	(0.0)	23.77	23.77	0.0	0.0	(0.0)	0.0	0.0
20	24.98	24.98	(0.0)	24.98	24.98	0.0	0.0	(0.0)	0.0	0.0
21	26.25	26.25	(0.0)	26.25	26.25	0.0	0.0	(0.0)	0.0	0.0
22	27.59	27.59	(0.0)	27.59	27.59	0.0	0.0	(0.0)	0.0	0.0
23	29.00	29.00	(0.0)	29.00	29.00	0.0	0.0	(0.0)	0.0	0.0
24	30.48	30.48	(0.0)	30.48	30.48	0.0	0.0	(0.0)	0.0	0.0
25	32.03	32.03	(0.0)	32.03	32.03	0.0	0.0	(0.0)	0.0	0.0
26	33.67	33.67	(0.0)	33.67	33.67	0.0	0.0	(0.0)	0.0	0.0
27	35.39	35.39	(0.0)	35.39	35.39	0.0	0.0	(0.0)	0.0	0.0
28	37.19	37.19	(0.0)	37.19	37.19	0.0	0.0	(0.0)	0.0	0.0
29	39.09	39.09	(0.0)	39.09	39.09	0.0	0.0	(0.0)	0.0	0.0
30	41.08	41.08	(0.0)	41.08	41.08	0.0	0.0	(0.0)	0.0	0.0
31	43.17	43.17	(0.0)	43.17	43.17	0.0	0.0	(0.0)	0.0	0.0
32	45.37	45.37	(0.0)	45.37	45.38	0.0	0.0	(0.0)	0.0	0.0
33	47.67	47.68	(0.0)	47.68	47.69	0.0	0.0	(0.0)	0.0	0.0
34	50.05	50.09	(0.0)	50.09	50.11	0.0	0.0	(0.0)	0.0	0.0
35	52.56	52.59	(0.0)	52.60	52.65	0.0	0.0	(0.0)	0.0	0.0
36	55.13	55.21	(0.0)	55.22	55.29	0.0	0.0	(0.0)	0.0	0.0
37	57.80	57.92	(0.0)	57.95	58.06	0.0	0.0	(0.0)	0.0	0.0
38	60.57	60.73	(0.1)	60.79	60.95	0.0	0.0	(0.0)	0.0	0.0
39	63.46	63.68	(0.1)	63.74	63.96	0.0	0.0	(0.0)	0.0	0.0
40	66.48	66.73	(0.1)	66.80	67.10	0.0	0.0	(0.0)	0.0	0.0
41	69.48	69.91	(0.1)	69.96	70.38	0.0	0.0	(0.0)	0.0	0.0
42	72.67	73.19	(0.1)	73.27	73.80	0.0	0.0	(0.0)	0.0	0.0
43	75.65	76.54	(0.1)	76.73	77.27	0.0	0.0	(0.0)	0.0	0.0
44	78.78	79.97	(0.2)	80.34	80.96	0.0	0.0	(0.0)	0.0	0.0
45	82.07	83.55	(0.3)	84.11	84.80	0.0	0.0	(0.0)	0.0	0.0
46	85.28	87.24	(0.4)	87.81	88.85	0.0	0.0	(0.0)	0.0	0.0
47	88.68	91.03	(0.5)	91.91	93.03	0.0	0.0	(0.0)	0.0	0.0
48	92.09	94.93	(0.6)	96.19	97.33	0.0	0.0	(0.0)	0.0	0.0
49	95.76	98.94	(0.7)	100.46	101.82	0.0	0.0	(0.0)	0.0	0.0
50	98.91	103.04	(0.9)	104.69	106.46	0.0	0.0	(0.0)	0.0	0.0

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE
(CONTINUED)
TABLE 4- 5: SUMMARY OF PCLTF INTEREST REVENUES AND PAYMENTS
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	INTEREST REVENUES					INTEREST PAYMENTS				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
51	101.37	107.20	(1.0)	109.16	111.26	0.0	0.0	(0.0)	0.0	0.0
52	102.50	111.59	(1.2)	113.94	116.40	0.0	0.0	(0.0)	0.0	0.0
53	103.49	116.17	(1.4)	118.92	121.78	0.0	0.0	(0.0)	0.0	0.0
54	104.33	120.95	(1.6)	124.11	127.41	0.0	0.0	(0.0)	0.0	0.0
55	105.63	125.90	(1.8)	129.46	133.30	0.0	0.0	(0.0)	0.0	0.0
56	107.91	130.98	(2.0)	134.16	139.45	0.0	0.0	(0.0)	0.0	0.0
57	110.18	136.17	(2.2)	139.69	145.68	0.0	0.0	(0.0)	0.0	0.0
58	112.61	141.55	(2.5)	145.82	152.13	0.0	0.0	(0.0)	0.0	0.0
59	115.13	147.12	(2.7)	152.22	158.82	0.0	0.0	(0.0)	0.0	0.0
60	117.61	152.90	(3.0)	158.90	165.70	0.0	0.0	(0.0)	0.0	0.0
61	120.06	158.92	(3.4)	165.85	172.79	0.0	0.0	(0.0)	0.0	0.0
62	122.48	165.11	(3.7)	173.04	180.21	0.0	0.0	(0.0)	0.0	0.0
63	124.85	171.28	(4.1)	180.33	187.88	0.0	0.0	(0.0)	0.0	0.0
64	126.75	177.37	(4.5)	185.66	195.58	0.0	0.0	(0.0)	0.0	0.0
65	128.04	183.36	(5.0)	193.31	203.41	0.0	0.0	(0.0)	0.0	0.0
66	129.51	189.43	(5.6)	201.27	212.12	0.0	0.0	(0.0)	0.0	0.0
67	130.82	195.83	(6.2)	209.52	221.48	0.0	0.0	(0.0)	0.0	0.0
68	131.92	202.43	(6.8)	216.99	231.16	0.0	0.0	(0.0)	0.0	0.0
69	132.92	209.30	(7.4)	224.08	241.11	0.0	0.0	(0.0)	0.0	0.0
70	130.02	216.39	(8.1)	231.53	251.42	0.0	0.0	(0.0)	0.0	0.0
71	125.52	223.58	(8.8)	240.39	262.20	0.0	0.0	(0.0)	0.0	0.0
72	120.90	230.93	(9.6)	249.84	273.41	0.0	0.0	(0.0)	0.0	0.0
73	116.60	238.37	(10.4)	259.53	285.07	0.0	0.0	(0.0)	0.0	0.0
74	112.62	245.96	(11.3)	265.24	297.22	0.0	0.0	(0.0)	0.0	0.0
75	110.62	253.67	(12.2)	274.52	309.85	0.0	0.0	(0.0)	0.0	0.0
76	107.53	261.52	(13.2)	284.03	322.91	0.0	0.0	(0.0)	0.0	0.0
77	102.98	269.50	(14.3)	294.29	336.48	0.0	0.0	(0.0)	0.0	0.0
78	98.21	277.64	(15.4)	305.65	350.59	0.0	0.0	(0.0)	0.0	0.0
79	94.67	285.80	(16.7)	317.38	364.43	0.0	0.0	(0.0)	0.0	0.0
80	90.57	293.90	(18.1)	329.50	378.49	0.0	0.0	(0.0)	0.0	0.0
81	85.66	302.10	(19.6)	342.03	393.24	0.0	0.0	(0.0)	0.0	0.0
82	79.78	310.38	(21.2)	354.97	408.84	0.0	0.0	(0.0)	0.0	0.0
83	73.05	318.75	(22.9)	368.32	425.05	0.0	0.0	(0.0)	0.0	0.0
84	65.20	327.24	(24.7)	382.11	441.92	0.0	0.0	(0.0)	0.0	0.0
85	56.37	336.20	(26.5)	396.35	459.39	0.0	-0.31	(0.3)	0.0	0.0
86	46.34	345.43	(28.2)	410.95	477.52	0.0	-0.96	(1.0)	0.0	0.0
87	35.31	354.52	(30.0)	425.81	496.21	0.0	-1.67	(1.7)	0.0	0.0
88	23.27	363.53	(32.0)	441.10	515.33	0.0	-2.44	(2.4)	0.0	0.0
89	10.28	372.90	(33.9)	454.23	535.02	0.0	-3.63	(3.3)	0.0	0.0
90	0.46	382.70	(35.9)	466.02	555.38	-4.01	-5.21	(4.2)	0.0	0.0
91	0.0	393.20	(37.7)	478.00	576.45	-19.64	-7.57	(5.3)	0.0	0.0
92	0.0	404.22	(39.5)	490.07	598.33	-38.36	-10.59	(6.6)	0.0	0.0
93	0.0	415.27	(41.4)	502.18	621.18	-57.73	-13.83	(8.0)	0.0	0.0
94	0.0	426.80	(43.3)	518.54	644.99	-78.93	-17.67	(9.6)	0.0	0.0
95	0.0	438.96	(45.1)	535.21	669.50	-102.06	-22.32	(11.4)	0.0	0.0
96	0.0	450.96	(47.0)	552.03	694.68	-127.02	-27.36	(13.4)	0.0	0.0
97	0.0	462.95	(48.9)	569.28	720.82	-153.76	-32.91	(15.7)	0.0	0.0
98	0.0	475.55	(51.1)	586.95	747.87	-188.45	-39.28	(18.2)	0.0	0.0
99	0.0	488.24	(53.3)	604.98	775.83	-223.59	-46.48	(21.0)	0.0	0.0
100	0.0	501.17	(55.7)	623.42	804.80	-261.60	-54.26	(24.1)	0.0	0.0

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE

TABLE 4- 6: SUMMARY OF ANNUAL PCLTF EXPENDITURES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	MONITORING		RESPONSE		POST-CLOSURE CARE		CLAIMS		INTEREST PAYMENTS	
YEAR	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)
1	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
2	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
3	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
4	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
5	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
6	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
7	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
8	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
9	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
10	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
11	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
12	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
13	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
14	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
15	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
16	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
17	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
18	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
19	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
20	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
21	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
22	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
23	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
24	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
25	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
26	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
27	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
28	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
29	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
30	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
31	0.00	(0.00)	0.0	(0.0)	0.00	(0.00)	0.0	(0.0)	0.0	(0.0)
32	0.01	(0.00)	0.0	(0.0)	0.02	(0.00)	0.0	(0.0)	0.0	(0.0)
33	0.03	(0.00)	0.0	(0.0)	0.04	(0.01)	0.0	(0.0)	0.0	(0.0)
34	0.06	(0.00)	0.01	(0.01)	0.10	(0.01)	0.0	(0.0)	0.0	(0.0)
35	0.09	(0.00)	0.03	(0.02)	0.14	(0.01)	0.0	(0.0)	0.0	(0.0)
36	0.12	(0.00)	0.02	(0.02)	0.19	(0.01)	0.0	(0.0)	0.0	(0.0)
37	0.14	(0.00)	0.18	(0.16)	0.24	(0.01)	0.0	(0.0)	0.0	(0.0)
38	0.18	(0.01)	0.05	(0.03)	0.29	(0.02)	0.0	(0.0)	0.0	(0.0)
39	0.20	(0.01)	0.13	(0.06)	0.33	(0.02)	0.0	(0.0)	0.0	(0.0)
40	0.23	(0.01)	0.12	(0.05)	0.37	(0.02)	0.0	(0.0)	0.0	(0.0)
41	0.26	(0.01)	0.19	(0.05)	0.42	(0.02)	0.0	(0.0)	0.0	(0.0)
42	0.29	(0.01)	0.31	(0.10)	0.46	(0.02)	0.0	(0.0)	0.0	(0.0)
43	0.31	(0.01)	0.66	(0.37)	0.50	(0.02)	0.0	(0.0)	0.0	(0.0)
44	0.34	(0.01)	0.55	(0.27)	0.53	(0.02)	0.0	(0.0)	0.0	(0.0)
45	0.37	(0.01)	0.63	(0.28)	0.57	(0.02)	0.0	(0.0)	0.0	(0.0)
46	0.38	(0.01)	0.77	(0.29)	0.60	(0.02)	0.0	(0.0)	0.0	(0.0)
47	0.41	(0.01)	0.79	(0.29)	0.63	(0.02)	0.0	(0.0)	0.0	(0.0)
48	0.43	(0.01)	1.01	(0.32)	0.66	(0.02)	0.0	(0.0)	0.0	(0.0)
49	0.45	(0.01)	0.93	(0.27)	0.69	(0.02)	0.0	(0.0)	0.0	(0.0)
50	0.46	(0.01)	1.47	(0.55)	0.72	(0.02)	0.0	(0.0)	0.0	(0.0)

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE
(CONTINUED)
TABLE 4- 6: SUMMARY OF ANNUAL PCLTF EXPENDITURES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	MONITORING		RESPONSE		POST-CLOSURE CARE		CLAIMS		INTEREST PAYMENTS	
YEAR	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)
51	0.48	(0.01)	1.17	(0.33)	0.74	(0.02)	0.0	(0.0)	0.0	(0.0)
52	0.49	(0.01)	1.15	(0.33)	0.78	(0.02)	0.0	(0.0)	0.0	(0.0)
53	0.51	(0.01)	1.06	(0.30)	0.80	(0.02)	0.0	(0.0)	0.0	(0.0)
54	0.53	(0.01)	1.03	(0.30)	0.83	(0.02)	0.0	(0.0)	0.0	(0.0)
55	0.54	(0.01)	1.08	(0.23)	0.85	(0.02)	0.0	(0.0)	0.0	(0.0)
56	0.56	(0.01)	1.28	(0.31)	0.88	(0.02)	0.0	(0.0)	0.0	(0.0)
57	0.58	(0.01)	1.28	(0.29)	0.90	(0.02)	0.0	(0.0)	0.0	(0.0)
58	0.59	(0.01)	1.28	(0.29)	0.92	(0.02)	0.0	(0.0)	0.0	(0.0)
59	0.60	(0.01)	1.28	(0.29)	0.95	(0.03)	0.0	(0.0)	0.0	(0.0)
60	0.62	(0.01)	1.24	(0.28)	0.97	(0.03)	0.0	(0.0)	0.0	(0.0)
61	0.63	(0.01)	1.12	(0.23)	1.00	(0.03)	0.0	(0.0)	0.0	(0.0)
62	0.64	(0.01)	1.46	(0.41)	1.02	(0.03)	0.0	(0.0)	0.0	(0.0)
63	0.66	(0.01)	1.84	(0.47)	1.04	(0.03)	0.0	(0.0)	0.0	(0.0)
64	0.67	(0.01)	2.22	(0.49)	1.06	(0.03)	0.0	(0.0)	0.0	(0.0)
65	0.68	(0.01)	2.61	(0.72)	1.08	(0.03)	0.0	(0.0)	0.0	(0.0)
66	0.69	(0.01)	2.23	(0.47)	1.10	(0.03)	0.0	(0.0)	0.0	(0.0)
67	0.71	(0.01)	2.24	(0.46)	1.12	(0.03)	0.0	(0.0)	0.0	(0.0)
68	0.73	(0.01)	2.14	(0.43)	1.14	(0.03)	0.0	(0.0)	0.0	(0.0)
69	0.73	(0.01)	2.00	(0.41)	1.16	(0.03)	0.0	(0.0)	0.0	(0.0)
70	0.74	(0.01)	2.16	(0.39)	1.18	(0.03)	0.0	(0.0)	0.0	(0.0)
71	0.75	(0.01)	2.11	(0.39)	1.20	(0.03)	0.0	(0.0)	0.0	(0.0)
72	0.77	(0.01)	2.27	(0.40)	1.23	(0.03)	0.0	(0.0)	0.0	(0.0)
73	0.78	(0.01)	2.22	(0.39)	1.26	(0.03)	0.0	(0.0)	0.0	(0.0)
74	0.80	(0.01)	2.31	(0.39)	1.28	(0.03)	0.0	(0.0)	0.0	(0.0)
75	0.81	(0.01)	2.28	(0.38)	1.31	(0.03)	0.0	(0.0)	0.0	(0.0)
76	0.82	(0.01)	2.33	(0.39)	1.34	(0.03)	0.0	(0.0)	0.0	(0.0)
77	0.83	(0.01)	2.31	(0.37)	1.36	(0.03)	0.0	(0.0)	0.0	(0.0)
78	0.84	(0.01)	2.33	(0.37)	1.38	(0.03)	0.0	(0.0)	0.0	(0.0)
79	0.86	(0.01)	2.56	(0.44)	1.40	(0.03)	0.0	(0.0)	0.0	(0.0)
80	0.87	(0.01)	2.56	(0.44)	1.42	(0.03)	0.0	(0.0)	0.0	(0.0)
81	0.88	(0.01)	2.59	(0.44)	1.44	(0.03)	0.0	(0.0)	0.0	(0.0)
82	0.89	(0.01)	2.57	(0.43)	1.46	(0.03)	0.0	(0.0)	0.0	(0.0)
83	0.90	(0.01)	2.60	(0.44)	1.49	(0.03)	0.0	(0.0)	0.0	(0.0)
84	0.91	(0.01)	2.49	(0.40)	1.51	(0.04)	0.0	(0.0)	0.0	(0.0)
85	0.92	(0.01)	2.54	(0.40)	1.53	(0.04)	0.0	(0.0)	-0.01	(0.01)
86	0.93	(0.01)	2.69	(0.45)	1.55	(0.04)	0.0	(0.0)	-0.03	(0.03)
87	0.94	(0.01)	2.79	(0.45)	1.57	(0.04)	0.0	(0.0)	-0.05	(0.05)
88	0.95	(0.01)	2.86	(0.43)	1.59	(0.03)	0.0	(0.0)	-0.07	(0.07)
89	0.96	(0.01)	2.81	(0.45)	1.61	(0.03)	0.0	(0.0)	-0.10	(0.09)
90	0.97	(0.01)	2.81	(0.45)	1.64	(0.03)	0.0	(0.0)	-0.14	(0.12)
91	0.99	(0.01)	2.82	(0.43)	1.66	(0.03)	0.0	(0.0)	-0.20	(0.14)
92	0.99	(0.01)	2.86	(0.42)	1.68	(0.03)	0.0	(0.0)	-0.27	(0.17)
93	1.00	(0.01)	2.87	(0.43)	1.70	(0.03)	0.0	(0.0)	-0.34	(0.20)
94	1.00	(0.01)	2.84	(0.42)	1.72	(0.03)	0.0	(0.0)	-0.42	(0.23)
95	1.02	(0.01)	2.86	(0.42)	1.74	(0.03)	0.0	(0.0)	-0.51	(0.26)
96	1.02	(0.01)	3.16	(0.48)	1.75	(0.03)	0.0	(0.0)	-0.60	(0.29)
97	1.04	(0.01)	2.91	(0.44)	1.78	(0.03)	0.0	(0.0)	-0.69	(0.33)
98	1.04	(0.01)	3.17	(0.56)	1.79	(0.03)	0.0	(0.0)	-0.79	(0.37)
99	1.05	(0.01)	3.10	(0.55)	1.81	(0.04)	0.0	(0.0)	-0.90	(0.41)
100	1.06	(0.01)	3.09	(0.55)	1.82	(0.04)	0.0	(0.0)	-1.01	(0.45)

TABLE 4- 7A: FREQUENCY OF RELEASES AT FACILITIES
X = EXPECTED RELEASES; S = SIMULATED RELEASES; D = DETECTED RELEASES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

YEARS	IP ON			DETECTABLE ON			TOXIC ON			TASTE/ODOR			DETECTABLE OFF			TOXIC OFF			BATHTUB		
	X	S	D	X	S	D	X	S	D	X	S	D	X	S	D	X	S	D	X	S	D
< 1	472	472	--	458	458	--	373	373	--	54	54	--	70	70	--	60	60	--	0	0	--
1 - 10	60	59	400	71	69	331	65	64	259	31	30	42	41	40	87	34	33	69	0	0	0
11 - 20	14	13	11	35	32	25	31	28	17	28	27	18	38	36	31	33	31	23	0	0	0
21 - 30	11	9	7	29	26	16	26	24	12	24	22	15	34	31	26	27	25	17	0	0	0
31 - 40	11	9	7	26	24	11	21	18	8	20	11	7	31	14	9	24	14	8	0	0	0
41 - 50	11	10	5	22	19	7	21	17	6	17	6	4	29	9	4	20	7	4	0	0	0
51 - 60	12	11	6	20	17	5	19	16	5	13	5	3	25	9	3	18	6	2	0	0	0
61 - 70	9	8	4	14	12	4	14	12	3	10	5	3	19	7	3	14	5	2	0	0	0
71 - 80	10	9	4	12	10	3	13	10	3	7	3	2	13	5	2	10	4	1	0	0	0
81 - 90	8	7	4	8	7	3	9	7	2	5	2	1	8	4	2	6	3	1	0	0	0
91 -100	9	8	4	7	6	2	8	6	1	3	2	1	5	2	1	4	2	1	0	0	0
101 -150	33	--	--	23	--	--	27	--	--	5	--	--	5	--	--	4	--	--	0	--	--
>150	18	--	--	16	--	--	16	--	--	2	--	--	1	--	--	1	--	--	0	--	--
TOTAL	678	615	452	741	680	407	643	575	316	219	167	96	319	227	168	255	190	128	0	0	0

TABLE 4- 7B: FREQUENCY OF RELEASES AT FACILITIES WITH QUALIFICATION STATUS PENDING
S = SIMULATED RELEASES; D = DETECTED RELEASES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

YEARS	IP ON		DETECTABLE ON		TOXIC ON		TASTE/ODOR		DETECTABLE OFF		TOXIC OFF		BATHTUB	
	S	D	S	D	S	D	S	D	S	D	S	D	S	D
1 - 10	52	279	58	228	53	178	23	29	31	61	26	49	0	0
11 - 20	7	7	16	15	15	11	13	9	18	15	15	11	0	0
21 - 30	3	4	10	9	9	6	8	6	11	10	9	6	0	0
31 - 40	3	3	7	5	5	4	3	2	4	3	4	3	0	0
41 - 50	2	2	3	3	4	2	1	1	2	1	1	1	0	0
51 - 60	2	2	2	2	3	2	1	1	1	1	1	0	0	0
61 - 70	1	1	1	1	2	1	1	1	1	1	1	0	0	0
71 - 80	2	1	1	1	1	1	0	0	1	0	0	0	0	0
81 - 90	1	1	1	1	1	0	0	0	0	0	0	0	0	0
91 -100	1	1	0	0	1	0	0	0	0	0	0	0	0	0
TOTAL	74	301	99	265	94	205	50	49	69	92	57	70	0	0

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE

TABLE 4- 7C: FREQUENCY OF RELEASES AT QUALIFIED FACILITIES
S = SIMULATED RELEASES; D = DETECTED RELEASES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

YEARS	IP ON		DETECTABLE ON		TOXIC ON		TASTE/ODOR		DETECTABLE OFF		TOXIC OFF		BATHTUB	
	S	D	S	D	S	D	S	D	S	D	S	D	S	D
1 - 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 - 20	2	1	2	1	2	0	1	1	2	1	1	0	0	0
21 - 30	3	2	5	1	4	1	2	1	3	1	2	1	0	0
31 - 40	3	3	6	2	5	2	2	2	3	2	3	1	0	0
41 - 50	4	2	5	2	5	2	2	1	3	2	2	1	0	0
51 - 60	5	3	6	2	5	2	2	1	4	1	3	1	0	0
61 - 70	4	3	5	2	4	2	2	1	3	1	2	1	0	0
71 - 80	4	2	4	1	4	1	1	1	2	1	2	1	0	0
81 - 90	4	3	3	1	4	1	1	1	2	1	1	0	0	0
91 -100	5	3	3	1	3	1	1	1	1	1	1	0	0	0
TOTAL	34	22	39	13	36	12	14	10	23	11	17	6	0	0

TABLE 4- 7D: FREQUENCY OF RELEASES AT UNQUALIFIED FACILITIES
S = SIMULATED RELEASES; D = DETECTED RELEASES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

YEARS	IP ON		DETECTABLE ON		TOXIC ON		TASTE/ODOR		DETECTABLE OFF		TOXIC OFF		BATHTUB	
	S	D	S	D	S	D	S	D	S	D	S	D	S	D
1 - 10	7	121	11	103	11	82	7	13	9	26	7	21	0	0
11 - 20	4	3	13	9	11	5	12	8	17	15	15	11	0	0
21 - 30	3	2	12	6	11	4	13	8	17	15	14	10	0	0
31 - 40	4	1	11	3	8	3	5	3	7	4	7	5	0	0
41 - 50	4	1	10	1	9	2	3	2	4	2	4	2	0	0
51 - 60	4	1	9	1	8	1	2	1	3	1	3	1	0	0
61 - 70	3	1	6	1	6	1	2	1	3	1	2	1	0	0
71 - 80	3	1	5	1	5	0	2	1	3	1	2	0	0	0
81 - 90	2	0	3	0	3	0	1	1	2	1	2	0	0	0
91 -100	2	0	3	0	2	0	1	0	1	0	1	0	0	0
TOTAL	36	131	83	125	74	98	48	38	66	66	57	51	0	0

TABLE 4- 8A: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
1	4.59	0.00	0.01	0.0	0.0	0.0	0.0
2	4.84	6.08	0.06	111.31	2.37	2.57	0.50
3	6.02	35.14	0.13	755.28	10.36	16.99	3.68
4	5.15	53.72	0.33	714.84	10.62	23.82	6.40
5	4.83	72.87	0.53	1194.57	12.83	25.03	6.17
6	4.31	89.24	0.70	919.78	5.74	22.66	5.96
7	2.79	79.22	0.80	233.09	7.61	9.64	4.08
8	2.70	69.94	0.83	117.44	2.46	4.84	0.90
9	2.62	60.10	0.76	132.81	3.14	5.69	0.90
10	2.49	49.79	0.68	186.21	1.76	4.32	1.00
11	2.40	40.24	0.62	101.11	1.80	3.88	0.69
12	2.33	38.69	0.55	252.63	2.04	4.67	0.82
13	2.27	39.11	0.54	135.38	3.07	4.82	0.71
14	2.19	38.03	0.51	175.65	4.19	2.97	0.75
15	2.13	36.41	0.51	145.89	1.28	6.13	0.54
16	2.08	35.66	0.48	128.13	3.57	2.58	0.82
17	2.03	35.41	0.47	61.90	2.55	1.52	0.48
18	1.96	33.96	0.43	208.57	1.20	2.90	0.73
19	1.92	34.04	0.42	107.78	1.24	1.94	0.75
20	1.87	32.48	0.40	158.33	1.35	4.06	0.46
21	1.83	31.59	0.39	53.60	1.51	3.17	0.44
22	1.78	30.07	0.38	106.96	0.66	3.39	0.46
23	1.73	28.78	0.35	40.44	2.24	2.86	0.38
24	1.68	28.30	0.34	115.97	1.29	3.72	0.46
25	1.63	28.22	0.33	139.93	0.98	2.79	0.40
26	1.59	27.17	0.31	19.26	0.43	0.63	0.21
27	1.57	26.30	0.29	30.18	0.49	2.25	0.33
28	1.53	25.65	0.30	66.41	0.88	0.60	0.27
29	1.50	25.12	0.29	62.19	0.65	2.34	0.31
30	1.46	24.81	0.30	76.37	2.17	0.84	0.25
31	1.44	24.33	0.29	228.55	1.15	2.36	0.33
32	1.40	23.06	0.28	0.29	0.33	0.17	0.10
33	1.36	22.63	0.27	75.81	0.56	0.49	0.27
34	1.33	22.03	0.25	4.43	0.09	1.66	0.10
35	1.29	21.29	0.24	19.06	0.25	1.57	0.13
36	1.27	20.74	0.23	59.28	0.05	0.33	0.04
37	1.24	20.01	0.23	0.0	0.08	0.01	0.02
38	1.21	19.55	0.24	26.36	0.63	0.73	0.29
39	1.18	19.29	0.25	16.35	2.62	1.97	0.13
40	1.15	18.31	0.24	0.42	1.46	0.65	0.10
41	1.13	17.47	0.24	0.40	0.03	0.06	0.02
42	1.10	17.02	0.25	0.0	0.00	0.01	0.04
43	1.08	15.98	0.24	101.63	0.0	0.0	0.02
44	1.05	15.36	0.24	33.64	0.43	0.41	0.10
45	1.03	14.99	0.25	33.59	0.04	0.07	0.04
46	1.01	14.40	0.24	0.0	0.01	0.0	0.06
47	0.99	14.06	0.23	0.0	0.05	0.0	0.04
48	0.96	13.38	0.23	17.44	0.04	0.31	0.04
49	0.94	13.23	0.22	0.0	0.01	0.01	0.04
50	0.92	12.91	0.20	0.0	0.00	0.31	0.0

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE

TABLE 4- 8A: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
51	0.90	12.41	0.20	0.14	0.02	0.02	0.08
52	0.90	12.25	0.20	0.0	0.04	0.0	0.02
53	0.88	11.68	0.19	0.0	0.0	0.0	0.0
54	0.87	11.26	0.19	15.32	0.11	0.35	0.04
55	0.88	11.37	0.20	8.46	0.03	0.63	0.02
56	0.85	10.47	0.19	0.0	0.01	0.37	0.02
57	0.85	10.05	0.18	0.0	0.27	0.0	0.0
58	0.84	9.94	0.19	0.14	0.00	0.0	0.02
59	0.83	9.69	0.19	0.0	0.01	0.07	0.02
60	0.82	9.70	0.18	0.01	0.01	0.03	0.02
61	0.81	9.28	0.19	0.0	0.0	0.0	0.0
62	0.80	8.91	0.19	0.0	0.00	0.07	0.02
63	0.80	8.72	0.19	0.0	0.0	0.0	0.04
64	0.79	8.74	0.18	60.35	0.29	0.0	0.02
65	0.78	8.59	0.18	0.80	0.03	0.02	0.04
66	0.78	8.17	0.17	0.0	0.22	0.31	0.02
67	0.77	7.96	0.17	0.0	1.51	1.88	0.0
68	0.76	7.63	0.15	8.15	0.00	0.0	0.02
69	0.75	7.43	0.15	0.19	0.00	0.31	0.02
70	0.75	7.28	0.14	0.0	0.00	0.0	0.02
71	0.74	6.98	0.14	1.87	0.01	0.03	0.06
72	0.74	6.75	0.13	0.0	0.00	0.31	0.04
73	0.73	6.83	0.12	0.0	0.01	0.31	0.04
74	0.72	6.41	0.11	40.66	0.0	0.31	0.02
75	0.71	6.41	0.12	0.0	0.0	0.0	0.0
76	0.70	6.04	0.11	0.12	0.01	0.01	0.02
77	0.69	5.82	0.11	0.0	0.0	0.0	0.0
78	0.69	5.75	0.11	0.0	0.0	0.0	0.0
79	0.69	5.66	0.11	0.0	0.00	0.31	0.0
80	0.69	5.54	0.11	15.95	0.00	0.0	0.02
81	0.68	5.34	0.12	0.0	0.00	0.0	0.02
82	0.67	5.27	0.12	0.0	0.0	0.0	0.0
83	0.67	4.96	0.12	0.0	0.22	0.0	0.02
84	0.67	4.90	0.12	0.34	0.0	0.0	0.02
85	0.65	4.70	0.12	0.36	0.02	0.01	0.02
86	0.65	4.65	0.12	0.0	0.0	0.0	0.0
87	0.64	4.55	0.12	0.0	0.00	0.0	0.02
88	0.64	4.31	0.13	0.0	0.00	0.31	0.02
89	0.64	4.13	0.12	0.0	0.0	0.0	0.0
90	0.63	4.03	0.12	0.0	0.0	0.0	0.0
91	0.63	3.87	0.12	0.0	0.0	0.0	0.0
92	0.62	3.81	0.12	0.0	0.0	0.0	0.0
93	0.62	3.68	0.12	0.0	0.0	0.0	0.0
94	0.61	3.64	0.14	0.0	0.0	0.0	0.02
95	0.61	3.62	0.15	0.0	0.0	0.0	0.0
96	0.61	3.47	0.14	1.88	0.01	0.10	0.04
97	0.60	3.73	0.13	0.93	0.07	0.03	0.02
98	0.59	3.53	0.13	0.0	0.0	0.0	0.0
99	0.58	3.47	0.10	0.0	0.0	0.0	0.0
100	0.58	3.35	0.10	0.0	0.0	0.0	0.0

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE

TABLE 4- 8B: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.00	0.0	0.01	0.0	0.0	0.0	0.0
7	0.01	0.0	0.03	0.0	0.0	0.0	0.0
8	0.03	0.0	0.06	0.0	0.0	0.0	0.0
9	0.07	0.0	0.13	0.0	0.0	0.0	0.0
10	0.11	0.01	0.19	0.0	0.0	0.0	0.0
11	0.16	0.13	0.25	0.0	0.0	0.0	0.0
12	0.20	0.14	0.33	0.0	0.0	0.0	0.0
13	0.23	0.13	0.39	10.07	0.00	0.31	0.02
14	0.28	0.15	0.44	2.36	0.0	0.07	0.02
15	0.31	0.25	0.49	0.13	0.13	0.66	0.02
16	0.34	0.33	0.55	0.13	0.05	0.01	0.04
17	0.38	0.79	0.59	20.61	0.04	0.63	0.02
18	0.41	0.72	0.65	0.0	0.01	0.34	0.02
19	0.44	1.22	0.69	0.0	0.00	0.94	0.02
20	0.47	1.22	0.73	25.61	0.14	0.38	0.06
21	0.49	1.24	0.77	20.28	0.38	0.07	0.10
22	0.52	1.43	0.81	0.03	0.04	1.57	0.04
23	0.54	1.18	0.85	6.55	0.00	0.0	0.04
24	0.56	1.49	0.88	0.04	0.01	1.89	0.02
25	0.58	1.13	0.91	0.0	0.01	0.0	0.02
26	0.60	1.20	0.94	1.22	0.36	0.33	0.08
27	0.62	1.21	0.97	0.0	0.06	0.06	0.06
28	0.63	1.50	0.98	12.39	0.36	0.05	0.04
29	0.65	1.42	1.02	6.95	0.00	0.33	0.02
30	0.67	1.98	1.04	8.14	0.30	0.96	0.04
31	0.68	1.74	1.06	0.0	0.07	0.10	0.0
32	0.69	1.76	1.07	27.12	0.26	0.09	0.10
33	0.69	2.03	1.09	1.66	0.20	0.14	0.08
34	0.70	1.96	1.11	0.12	0.02	0.02	0.08
35	0.71	2.13	1.12	5.48	0.07	0.10	0.04
36	0.72	2.25	1.14	0.01	0.01	0.11	0.06
37	0.73	2.45	1.16	0.0	0.02	1.88	0.04
38	0.74	2.43	1.17	0.08	0.04	0.33	0.02
39	0.76	2.37	1.19	25.14	0.04	0.94	0.04
40	0.77	2.35	1.20	7.37	0.01	0.07	0.08
41	0.78	2.87	1.22	2.49	0.40	0.40	0.10
42	0.79	2.94	1.24	0.0	0.00	0.01	0.02
43	0.80	3.02	1.26	7.26	0.03	0.33	0.02
44	0.81	2.98	1.29	36.08	0.10	0.70	0.10
45	0.82	3.02	1.30	4.93	0.02	0.09	0.08
46	0.82	3.10	1.32	8.42	0.02	1.90	0.08
47	0.84	3.11	1.34	36.40	0.05	0.37	0.02
48	0.86	3.33	1.37	73.00	0.14	0.67	0.10
49	0.87	3.30	1.40	0.0	0.00	0.0	0.0
50	0.88	4.03	1.42	21.40	0.09	0.66	0.08

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE

TABLE 4- 8B: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
51	0.89	3.72	1.45	11.72	0.37	0.0	0.08
52	0.90	4.03	1.47	0.95	0.10	0.37	0.06
53	0.91	3.95	1.50	91.02	0.02	1.58	0.04
54	0.92	3.92	1.52	0.03	0.00	0.0	0.02
55	0.93	4.03	1.53	8.02	1.01	0.73	0.06
56	0.94	4.16	1.55	0.88	0.58	0.0	0.02
57	0.96	4.18	1.58	23.84	0.04	0.39	0.06
58	0.97	4.19	1.60	0.0	0.01	0.0	0.02
59	0.97	4.58	1.62	27.60	0.02	0.63	0.04
60	0.99	4.10	1.64	0.10	0.02	0.01	0.04
61	1.00	4.03	1.66	0.0	0.00	0.0	0.0
62	1.01	4.42	1.68	0.00	0.22	0.16	0.08
63	1.02	4.72	1.70	38.83	0.13	0.39	0.08
64	1.02	5.09	1.73	1.19	0.21	0.08	0.13
65	1.03	5.49	1.75	0.0	0.09	0.63	0.0
66	1.04	5.11	1.77	21.22	0.08	0.38	0.08
67	1.05	5.10	1.79	0.0	0.10	0.05	0.02
68	1.06	5.03	1.81	0.0	0.00	0.01	0.0
69	1.07	4.87	1.84	0.0	0.00	0.0	0.0
70	1.08	5.07	1.86	11.51	0.03	0.31	0.08
71	1.09	5.01	1.87	0.0	0.00	0.0	0.0
72	1.09	5.16	1.90	101.98	0.03	1.62	0.02
73	1.10	5.11	1.91	0.0	0.01	0.01	0.08
74	1.11	5.29	1.93	10.90	0.09	0.31	0.06
75	1.11	5.24	1.94	36.56	0.01	0.31	0.04
76	1.13	5.33	1.95	0.0	0.00	0.05	0.04
77	1.13	5.31	1.97	0.0	0.02	0.03	0.0
78	1.14	5.33	1.98	0.0	0.01	0.31	0.02
79	1.14	5.51	1.99	0.00	0.30	0.31	0.04
80	1.15	5.51	2.01	2.81	0.23	0.0	0.02
81	1.16	5.53	2.02	56.48	0.01	0.0	0.02
82	1.17	5.50	2.03	0.0	0.0	0.0	0.0
83	1.17	5.53	2.05	0.0	0.01	0.01	0.02
84	1.18	5.42	2.06	0.0	0.0	0.0	0.0
85	1.18	5.48	2.08	0.0	0.01	0.0	0.02
86	1.19	5.63	2.09	2.78	0.02	0.0	0.06
87	1.20	5.74	2.11	0.0	0.02	0.02	0.02
88	1.20	5.81	2.12	32.81	0.01	0.36	0.04
89	1.21	5.76	2.13	0.0	0.26	0.0	0.0
90	1.21	5.75	2.15	61.61	0.04	0.33	0.02
91	1.22	5.76	2.16	0.19	0.01	0.01	0.04
92	1.22	5.79	2.18	15.88	0.90	0.18	0.06
93	1.23	5.81	2.20	85.37	0.00	0.05	0.02
94	1.24	5.78	2.21	0.0	0.02	0.0	0.0
95	1.25	5.80	2.23	0.01	0.00	0.0	0.02
96	1.25	6.11	2.24	0.01	0.0	0.0	0.02
97	1.26	5.86	2.26	0.0	0.0	0.0	0.0
98	1.27	6.13	2.27	0.0	0.02	0.64	0.0
99	1.27	6.05	2.30	5.30	2.86	0.0	0.08
100	1.28	6.04	2.33	0.0	0.00	0.0	0.02

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE

TABLE 4- 8C: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
1	0.48	5.06	0.29	119.40	1.90	3.00	0.90
2	1.04	10.97	0.78	125.44	1.19	5.04	0.61
3	1.54	23.18	1.21	292.10	6.38	11.51	2.24
4	1.65	30.89	1.56	647.44	10.42	12.88	2.45
5	1.59	35.34	1.84	429.31	2.13	10.86	2.11
6	1.46	40.94	1.81	515.17	6.53	9.41	1.59
7	0.97	35.76	1.80	101.46	1.98	7.83	1.55
8	0.95	31.83	1.80	22.96	0.14	1.06	0.27
9	0.98	31.22	1.87	165.53	0.57	3.07	0.23
10	1.00	31.14	1.95	246.06	4.51	6.21	0.54
11	1.04	31.79	2.03	543.79	1.50	4.05	0.88
12	1.06	33.49	2.10	345.15	0.76	5.34	0.59
13	1.07	35.65	2.14	75.54	0.58	2.02	0.67
14	1.07	37.83	2.17	86.95	1.44	1.24	0.56
15	1.09	40.06	2.22	275.64	4.56	7.25	0.65
16	1.08	40.55	2.25	97.10	3.46	4.11	0.59
17	1.09	42.17	2.29	340.11	1.50	9.41	0.65
18	1.09	43.76	2.33	149.41	5.67	4.31	0.77
19	1.11	45.43	2.36	249.38	1.37	4.79	0.63
20	1.11	46.99	2.40	175.25	1.26	5.85	0.69
21	1.13	49.01	2.43	274.30	2.26	5.52	0.63
22	1.13	51.37	2.46	58.30	2.42	3.54	0.73
23	1.12	52.75	2.49	75.71	4.35	4.15	0.59
24	1.12	52.80	2.51	92.43	0.41	3.40	0.54
25	1.12	54.05	2.54	180.34	1.58	4.74	0.77
26	1.13	55.38	2.57	172.63	2.21	5.00	0.59
27	1.14	56.65	2.59	137.43	1.58	4.82	0.50
28	1.14	57.45	2.60	93.58	3.78	1.83	0.59
29	1.14	59.73	2.61	80.07	4.12	6.14	0.63
30	1.13	60.82	2.59	484.05	4.01	2.40	0.56
31	1.10	61.54	2.53	88.32	1.21	1.50	0.38
32	0.94	62.47	2.35	206.51	1.64	3.93	0.65
33	0.81	63.05	2.20	97.45	0.33	1.14	0.36
34	0.68	63.13	2.07	48.00	1.24	0.69	0.25
35	0.58	63.52	1.97	52.09	0.55	1.42	0.29
36	0.54	64.06	1.97	36.77	0.15	1.72	0.17
37	0.53	64.48	1.97	66.45	0.13	0.05	0.19
38	0.51	65.09	1.97	20.89	0.52	0.94	0.21
39	0.51	65.37	1.99	33.28	0.17	0.78	0.27
40	0.50	66.33	2.00	2.04	0.48	0.46	0.13
41	0.49	67.23	2.01	49.92	0.49	0.40	0.19
42	0.48	67.54	2.02	2.47	0.07	0.08	0.08
43	0.48	68.36	2.03	49.80	0.04	0.70	0.10
44	0.47	68.90	2.04	130.58	0.36	1.91	0.13
45	0.46	69.52	2.05	0.03	0.35	0.40	0.13
46	0.45	70.15	2.06	87.01	0.10	3.38	0.15
47	0.45	70.66	2.07	16.52	0.02	1.63	0.06
48	0.45	71.41	2.08	30.96	0.03	1.72	0.17
49	0.44	72.30	2.09	5.37	0.58	1.73	0.04
50	0.43	72.34	2.09	15.06	0.01	0.33	0.08

TABLE 4- 8C: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
51	0.42	73.20	2.10	74.38	0.08	0.65	0.10
52	0.42	72.91	2.10	0.08	0.04	0.63	0.06
53	0.41	73.42	2.11	18.81	1.94	0.06	0.06
54	0.41	73.78	2.12	0.71	0.0	0.0	0.02
55	0.40	73.86	2.12	21.89	0.0	0.0	0.02
56	0.40	74.49	2.13	0.0	0.01	0.01	0.02
57	0.40	74.86	2.14	0.34	0.01	0.33	0.04
58	0.39	75.28	2.14	42.12	0.10	0.34	0.10
59	0.38	75.57	2.15	21.73	0.00	0.63	0.04
60	0.38	75.79	2.15	91.77	0.02	1.88	0.06
61	0.38	76.02	2.16	134.92	0.01	0.33	0.06
62	0.38	76.69	2.16	1.28	0.06	0.04	0.04
63	0.37	76.75	2.17	0.0	0.04	0.36	0.0
64	0.37	76.78	2.17	0.0	0.0	0.0	0.0
65	0.36	77.21	2.18	30.74	2.06	0.63	0.04
66	0.37	77.70	2.19	0.0	0.12	0.31	0.02
67	0.36	78.11	2.19	6.26	0.00	0.07	0.06
68	0.36	78.30	2.20	0.0	0.01	0.33	0.0
69	0.35	78.46	2.20	0.18	0.03	1.57	0.04
70	0.35	78.49	2.20	0.13	0.09	0.0	0.04
71	0.35	78.71	2.21	0.0	0.0	0.0	0.02
72	0.34	79.00	2.21	5.89	0.10	0.31	0.02
73	0.34	79.26	2.21	4.05	0.14	1.63	0.02
74	0.34	79.46	2.22	16.65	1.93	0.64	0.02
75	0.34	79.57	2.22	49.18	0.01	0.31	0.02
76	0.34	80.17	2.23	31.46	0.21	0.31	0.08
77	0.34	80.28	2.23	0.0	0.00	0.0	0.02
78	0.34	80.33	2.23	1.90	0.01	0.18	0.04
79	0.34	80.45	2.23	47.51	0.19	0.64	0.02
80	0.33	80.64	2.23	0.0	0.01	0.40	0.02
81	0.33	80.70	2.23	0.0	0.01	0.0	0.0
82	0.32	80.83	2.23	86.52	0.02	1.57	0.04
83	0.32	81.10	2.23	0.0	0.0	0.0	0.0
84	0.32	81.19	2.23	0.0	0.0	0.0	0.02
85	0.32	81.37	2.23	0.0	0.01	0.33	0.0
86	0.32	81.44	2.23	0.0	0.00	0.07	0.02
87	0.32	81.53	2.23	116.64	0.04	0.0	0.06
88	0.32	81.85	2.24	1.08	0.05	0.03	0.04
89	0.31	82.00	2.24	24.87	0.01	0.98	0.02
90	0.31	82.11	2.25	6.80	0.10	0.44	0.02
91	0.31	82.33	2.25	0.48	0.04	0.04	0.04
92	0.32	82.38	2.24	0.17	0.01	0.01	0.02
93	0.31	82.45	2.25	2.25	0.03	0.06	0.06
94	0.31	82.62	2.25	0.0	0.00	0.01	0.0
95	0.31	82.49	2.25	0.0	0.0	0.0	0.0
96	0.31	82.61	2.25	2.47	0.19	0.05	0.02
97	0.31	82.67	2.25	0.0	0.0	0.0	0.0
98	0.31	83.29	2.25	0.0	0.00	0.05	0.0
99	0.31	82.98	2.26	18.69	0.16	0.01	0.02
100	0.31	83.11	2.25	9.22	0.03	0.31	0.02

TABLE 4- 9A: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	4.8	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
3	6.0	0.0	0.0	0.0	34.2	0.0	0.1	0.9	0.1	0.0	0.0	0.0
4	5.1	0.0	0.0	0.1	49.5	0.0	0.4	3.8	0.3	0.0	0.0	0.0
5	4.7	0.0	0.0	0.1	64.0	0.0	0.9	8.0	0.5	0.0	0.0	0.0
6	4.2	0.0	0.0	0.1	77.9	0.0	1.1	10.2	0.7	0.0	0.0	0.0
7	2.7	0.0	0.0	0.1	66.2	0.0	1.3	11.7	0.8	0.0	0.0	0.0
8	2.6	0.0	0.0	0.0	57.9	0.0	1.2	10.9	0.8	0.0	0.0	0.0
9	2.5	0.0	0.0	0.1	51.7	0.0	0.8	7.5	0.7	0.0	0.0	0.0
10	2.5	0.0	0.0	0.0	44.6	0.0	0.5	4.7	0.6	0.0	0.0	0.0
11	2.4	0.0	0.0	0.0	37.1	0.0	0.3	2.8	0.6	0.0	0.0	0.0
12	2.3	0.0	0.0	0.0	36.6	0.0	0.2	1.9	0.5	0.0	0.0	0.0
13	2.2	0.0	0.0	0.0	37.3	0.0	0.2	1.6	0.5	0.0	0.0	0.0
14	2.2	0.0	0.0	0.0	36.1	0.0	0.2	1.8	0.5	0.0	0.0	0.0
15	2.1	0.0	0.0	0.0	34.5	0.0	0.2	1.7	0.5	0.0	0.0	0.0
16	2.1	0.0	0.0	0.0	34.0	0.0	0.2	1.5	0.5	0.0	0.0	0.0
17	2.0	0.0	0.0	0.0	33.8	0.0	0.2	1.5	0.5	0.0	0.0	0.0
18	1.9	0.0	0.0	0.0	32.5	0.0	0.1	1.3	0.4	0.0	0.0	0.0
19	1.9	0.0	0.0	0.0	32.6	0.0	0.1	1.3	0.4	0.0	0.0	0.0
20	1.9	0.0	0.0	0.0	31.1	0.0	0.1	1.2	0.4	0.0	0.0	0.0
21	1.8	0.0	0.0	0.0	30.2	0.0	0.1	1.2	0.4	0.0	0.0	0.0
22	1.8	0.0	0.0	0.0	29.1	0.0	0.1	0.8	0.4	0.0	0.0	0.0
23	1.7	0.0	0.0	0.0	28.1	0.0	0.1	0.6	0.3	0.0	0.0	0.0
24	1.7	0.0	0.0	0.0	27.7	0.0	0.1	0.6	0.3	0.0	0.0	0.0
25	1.6	0.0	0.0	0.0	27.4	0.0	0.1	0.7	0.3	0.0	0.0	0.0
26	1.6	0.0	0.0	0.0	26.6	0.0	0.1	0.5	0.3	0.0	0.0	0.0
27	1.6	0.0	0.0	0.0	25.7	0.0	0.1	0.5	0.3	0.0	0.0	0.0
28	1.5	0.0	0.0	0.0	25.0	0.0	0.1	0.6	0.3	0.0	0.0	0.0
29	1.5	0.0	0.0	0.0	24.6	0.0	0.1	0.5	0.3	0.0	0.0	0.0
30	1.5	0.0	0.0	0.0	24.3	0.0	0.1	0.5	0.3	0.0	0.0	0.0
31	1.4	0.0	0.0	0.0	23.8	0.0	0.0	0.4	0.3	0.0	0.0	0.0
32	1.4	0.0	0.0	0.0	22.7	0.0	0.0	0.3	0.3	0.0	0.0	0.0
33	1.4	0.0	0.0	0.0	22.3	0.0	0.0	0.3	0.3	0.0	0.0	0.0
34	1.3	0.0	0.0	0.0	21.6	0.0	0.0	0.4	0.2	0.0	0.0	0.0
35	1.3	0.0	0.0	0.0	21.0	0.0	0.0	0.3	0.2	0.0	0.0	0.0
36	1.3	0.0	0.0	0.0	20.5	0.0	0.0	0.2	0.2	0.0	0.0	0.0
37	1.2	0.0	0.0	0.0	19.7	0.0	0.0	0.3	0.2	0.0	0.0	0.0
38	1.2	0.0	0.0	0.0	19.2	0.0	0.0	0.3	0.2	0.0	0.0	0.0
39	1.2	0.0	0.0	0.0	19.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0
40	1.1	0.0	0.0	0.0	18.0	0.0	0.0	0.3	0.2	0.0	0.0	0.0
41	1.1	0.0	0.0	0.0	17.0	0.0	0.0	0.4	0.2	0.0	0.0	0.0
42	1.1	0.0	0.0	0.0	16.6	0.0	0.0	0.4	0.2	0.0	0.0	0.0
43	1.1	0.0	0.0	0.0	15.5	0.0	0.0	0.4	0.2	0.0	0.0	0.0
44	1.0	0.0	0.0	0.0	14.9	0.0	0.0	0.4	0.2	0.0	0.0	0.0
45	1.0	0.0	0.0	0.0	14.6	0.0	0.0	0.3	0.2	0.0	0.0	0.0
46	1.0	0.0	0.0	0.0	14.0	0.0	0.0	0.4	0.2	0.0	0.0	0.0
47	1.0	0.0	0.0	0.0	13.7	0.0	0.0	0.3	0.2	0.0	0.0	0.0
48	1.0	0.0	0.0	0.0	13.1	0.0	0.0	0.2	0.2	0.0	0.0	0.0
49	0.9	0.0	0.0	0.0	13.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0
50	0.9	0.0	0.0	0.0	12.7	0.0	0.0	0.2	0.2	0.0	0.0	0.0

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE

TABLE 4- 9A: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.9	0.0	0.0	0.0	12.3	0.0	0.0	0.1	0.2	0.0	0.0	0.0
52	0.9	0.0	0.0	0.0	12.1	0.0	0.0	0.1	0.2	0.0	0.0	0.0
53	0.9	0.0	0.0	0.0	11.6	0.0	0.0	0.1	0.2	0.0	0.0	0.0
54	0.9	0.0	0.0	0.0	11.1	0.0	0.0	0.1	0.2	0.0	0.0	0.0
55	0.9	0.0	0.0	0.0	11.2	0.0	0.0	0.1	0.2	0.0	0.0	0.0
56	0.9	0.0	0.0	0.0	10.3	0.0	0.0	0.1	0.2	0.0	0.0	0.0
57	0.8	0.0	0.0	0.0	9.9	0.0	0.0	0.2	0.2	0.0	0.0	0.0
58	0.8	0.0	0.0	0.0	9.8	0.0	0.0	0.2	0.2	0.0	0.0	0.0
59	0.8	0.0	0.0	0.0	9.5	0.0	0.0	0.1	0.2	0.0	0.0	0.0
60	0.8	0.0	0.0	0.0	9.6	0.0	0.0	0.1	0.2	0.0	0.0	0.0
61	0.8	0.0	0.0	0.0	9.1	0.0	0.0	0.1	0.2	0.0	0.0	0.0
62	0.8	0.0	0.0	0.0	8.8	0.0	0.0	0.1	0.2	0.0	0.0	0.0
63	0.8	0.0	0.0	0.0	8.6	0.0	0.0	0.1	0.2	0.0	0.0	0.0
64	0.8	0.0	0.0	0.0	8.6	0.0	0.0	0.1	0.2	0.0	0.0	0.0
65	0.8	0.0	0.0	0.0	8.4	0.0	0.0	0.1	0.2	0.0	0.0	0.0
66	0.8	0.0	0.0	0.0	8.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0
67	0.8	0.0	0.0	0.0	7.8	0.0	0.0	0.1	0.2	0.0	0.0	0.0
68	0.8	0.0	0.0	0.0	7.5	0.0	0.0	0.1	0.1	0.0	0.0	0.0
69	0.7	0.0	0.0	0.0	7.3	0.0	0.0	0.1	0.1	0.0	0.0	0.0
70	0.7	0.0	0.0	0.0	7.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0
71	0.7	0.0	0.0	0.0	6.9	0.0	0.0	0.1	0.1	0.0	0.0	0.0
72	0.7	0.0	0.0	0.0	6.7	0.0	0.0	0.1	0.1	0.0	0.0	0.0
73	0.7	0.0	0.0	0.0	6.8	0.0	0.0	0.1	0.1	0.0	0.0	0.0
74	0.7	0.0	0.0	0.0	6.3	0.0	0.0	0.1	0.1	0.0	0.0	0.0
75	0.7	0.0	0.0	0.0	6.3	0.0	0.0	0.1	0.1	0.0	0.0	0.0
76	0.7	0.0	0.0	0.0	5.9	0.0	0.0	0.1	0.1	0.0	0.0	0.0
77	0.7	0.0	0.0	0.0	5.7	0.0	0.0	0.1	0.1	0.0	0.0	0.0
78	0.7	0.0	0.0	0.0	5.6	0.0	0.0	0.1	0.1	0.0	0.0	0.0
79	0.7	0.0	0.0	0.0	5.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
80	0.7	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0
81	0.7	0.0	0.0	0.0	5.3	0.0	0.0	0.1	0.1	0.0	0.0	0.0
82	0.7	0.0	0.0	0.0	5.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0
83	0.7	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
84	0.7	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
85	0.7	0.0	0.0	0.0	4.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0
86	0.7	0.0	0.0	0.0	4.6	0.0	0.0	0.1	0.1	0.0	0.0	0.0
87	0.6	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0
88	0.6	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
89	0.6	0.0	0.0	0.0	4.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0
90	0.6	0.0	0.0	0.0	4.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
91	0.6	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0
92	0.6	0.0	0.0	0.0	3.7	0.0	0.0	0.1	0.1	0.0	0.0	0.0
93	0.6	0.0	0.0	0.0	3.6	0.0	0.0	0.1	0.1	0.0	0.0	0.0
94	0.6	0.0	0.0	0.0	3.5	0.0	0.0	0.1	0.1	0.0	0.0	0.0
95	0.6	0.0	0.0	0.0	3.5	0.0	0.0	0.1	0.1	0.0	0.0	0.0
96	0.6	0.0	0.0	0.0	3.4	0.0	0.0	0.1	0.1	0.0	0.0	0.0
97	0.6	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0
98	0.6	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0
99	0.6	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
100	0.6	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE

TABLE 4- 9B: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
10	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
11	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0
12	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0
13	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.0
14	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.4	0.0	0.0	0.0
15	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.5	0.0	0.0	0.0
16	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.5	0.0	0.0	0.0
17	0.4	0.0	0.0	0.0	0.7	0.0	0.0	0.1	0.6	0.0	0.0	0.0
18	0.4	0.0	0.0	0.0	0.5	0.0	0.0	0.2	0.6	0.0	0.0	0.0
19	0.4	0.0	0.0	0.0	0.7	0.0	0.1	0.5	0.7	0.0	0.0	0.0
20	0.5	0.0	0.0	0.0	0.8	0.0	0.0	0.4	0.7	0.0	0.0	0.0
21	0.5	0.0	0.0	0.0	0.8	0.0	0.0	0.4	0.8	0.0	0.0	0.0
22	0.5	0.0	0.0	0.0	1.0	0.0	0.0	0.4	0.8	0.0	0.0	0.0
23	0.5	0.0	0.0	0.0	0.8	0.0	0.0	0.4	0.8	0.0	0.0	0.0
24	0.6	0.0	0.0	0.0	1.2	0.0	0.0	0.3	0.9	0.0	0.0	0.0
25	0.6	0.0	0.0	0.0	0.8	0.0	0.0	0.3	0.9	0.0	0.0	0.0
26	0.6	0.0	0.0	0.0	0.9	0.0	0.0	0.3	0.9	0.0	0.0	0.0
27	0.6	0.0	0.0	0.0	0.9	0.0	0.0	0.3	1.0	0.0	0.0	0.0
28	0.6	0.0	0.0	0.0	1.0	0.0	0.1	0.5	1.0	0.0	0.0	0.0
29	0.6	0.0	0.0	0.0	0.9	0.0	0.1	0.5	1.0	0.0	0.0	0.0
30	0.7	0.0	0.0	0.0	1.4	0.0	0.1	0.5	1.0	0.0	0.0	0.0
31	0.7	0.0	0.0	0.0	1.2	0.0	0.1	0.5	1.0	0.0	0.0	0.0
32	0.7	0.0	0.0	0.0	1.2	0.0	0.1	0.5	1.0	0.0	0.0	0.0
33	0.7	0.0	0.0	0.0	1.4	0.0	0.1	0.6	1.0	0.0	0.0	0.0
34	0.6	0.1	0.0	0.0	1.3	0.0	0.1	0.6	1.0	0.1	0.0	0.0
35	0.6	0.1	0.0	0.0	1.5	0.0	0.1	0.5	1.0	0.1	0.0	0.0
36	0.6	0.1	0.0	0.0	1.4	0.0	0.1	0.7	0.9	0.2	0.0	0.0
37	0.6	0.1	0.0	0.0	1.5	0.2	0.1	0.7	0.9	0.2	0.0	0.0
38	0.6	0.2	0.0	0.0	1.7	0.1	0.1	0.6	0.9	0.3	0.0	0.0
39	0.5	0.2	0.0	0.0	1.6	0.1	0.1	0.6	0.8	0.3	0.0	0.0
40	0.5	0.2	0.0	0.0	1.6	0.1	0.1	0.6	0.8	0.4	0.0	0.0
41	0.5	0.3	0.0	0.0	2.0	0.2	0.1	0.6	0.8	0.4	0.0	0.0
42	0.5	0.3	0.0	0.0	2.0	0.3	0.1	0.6	0.8	0.5	0.0	0.0
43	0.5	0.3	0.0	0.0	1.7	0.7	0.1	0.6	0.8	0.5	0.0	0.0
44	0.5	0.3	0.0	0.0	1.7	0.5	0.1	0.6	0.7	0.5	0.0	0.0
45	0.4	0.4	0.0	0.0	1.7	0.6	0.1	0.7	0.7	0.6	0.0	0.0
46	0.4	0.4	0.0	0.0	1.6	0.8	0.1	0.7	0.7	0.6	0.0	0.0
47	0.4	0.4	0.0	0.0	1.6	0.8	0.1	0.7	0.7	0.6	0.0	0.0
48	0.4	0.4	0.0	0.0	1.6	1.0	0.1	0.7	0.7	0.7	0.0	0.0
49	0.4	0.4	0.0	0.0	1.7	0.9	0.1	0.7	0.7	0.7	0.0	0.0
50	0.4	0.5	0.0	0.0	1.9	1.5	0.1	0.6	0.7	0.7	0.0	0.0

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE

TABLE 4- 9B: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.4	0.5	0.0	0.0	1.7	1.2	0.1	0.7	0.7	0.7	0.0	0.0
52	0.4	0.5	0.0	0.0	2.0	1.1	0.1	0.8	0.7	0.8	0.0	0.0
53	0.4	0.5	0.0	0.0	2.0	1.1	0.1	0.8	0.7	0.8	0.0	0.0
54	0.4	0.5	0.0	0.0	2.0	1.0	0.1	0.8	0.7	0.8	0.0	0.0
55	0.4	0.5	0.0	0.0	2.2	1.1	0.1	0.7	0.7	0.9	0.0	0.0
56	0.4	0.6	0.0	0.0	2.1	1.3	0.1	0.7	0.7	0.9	0.0	0.0
57	0.4	0.6	0.0	0.0	2.0	1.3	0.1	0.8	0.7	0.9	0.0	0.0
58	0.4	0.6	0.0	0.0	2.0	1.3	0.1	0.9	0.7	0.9	0.0	0.0
59	0.4	0.6	0.0	0.0	2.4	1.3	0.1	0.9	0.7	0.9	0.0	0.0
60	0.4	0.6	0.0	0.0	1.9	1.2	0.1	0.9	0.7	1.0	0.0	0.0
61	0.4	0.6	0.0	0.0	1.9	1.1	0.1	0.9	0.6	1.0	0.0	0.0
62	0.4	0.6	0.0	0.0	2.0	1.5	0.1	0.8	0.7	1.0	0.0	0.0
63	0.4	0.7	0.0	0.0	2.0	1.8	0.1	0.8	0.7	1.0	0.0	0.0
64	0.3	0.7	0.0	0.0	2.0	2.2	0.1	0.8	0.7	1.1	0.0	0.0
65	0.3	0.7	0.0	0.0	2.0	2.6	0.1	0.8	0.7	1.1	0.0	0.0
66	0.3	0.7	0.0	0.0	2.0	2.2	0.1	0.8	0.7	1.1	0.0	0.0
67	0.3	0.7	0.0	0.0	1.9	2.2	0.1	0.8	0.7	1.1	0.0	0.0
68	0.3	0.7	0.0	0.0	2.0	2.1	0.1	0.8	0.7	1.1	0.0	0.0
69	0.3	0.7	0.0	0.0	2.0	2.0	0.1	0.8	0.7	1.2	0.0	0.0
70	0.3	0.7	0.0	0.0	2.0	2.2	0.1	0.8	0.7	1.2	0.0	0.0
71	0.3	0.8	0.0	0.0	2.0	2.1	0.1	0.8	0.7	1.2	0.0	0.0
72	0.3	0.8	0.0	0.0	1.9	2.3	0.1	0.8	0.7	1.2	0.0	0.0
73	0.3	0.8	0.0	0.0	1.9	2.2	0.1	0.9	0.6	1.3	0.0	0.0
74	0.3	0.8	0.0	0.0	2.0	2.3	0.1	0.9	0.6	1.3	0.0	0.0
75	0.3	0.8	0.0	0.0	2.0	2.3	0.1	0.8	0.6	1.3	0.0	0.0
76	0.3	0.8	0.0	0.0	2.1	2.3	0.1	0.8	0.6	1.3	0.0	0.0
77	0.3	0.8	0.0	0.0	2.1	2.3	0.1	0.8	0.6	1.4	0.0	0.0
78	0.3	0.8	0.0	0.0	2.0	2.3	0.1	0.9	0.6	1.4	0.0	0.0
79	0.3	0.9	0.0	0.0	1.9	2.6	0.1	0.9	0.6	1.4	0.0	0.0
80	0.3	0.9	0.0	0.0	1.9	2.6	0.1	0.9	0.6	1.4	0.0	0.0
81	0.3	0.9	0.0	0.0	1.9	2.6	0.1	0.9	0.6	1.4	0.0	0.0
82	0.3	0.9	0.0	0.0	1.9	2.6	0.1	0.9	0.6	1.5	0.0	0.0
83	0.3	0.9	0.0	0.0	1.9	2.6	0.1	0.9	0.6	1.5	0.0	0.0
84	0.3	0.9	0.0	0.0	1.9	2.5	0.1	0.9	0.5	1.5	0.0	0.0
85	0.3	0.9	0.0	0.0	1.9	2.5	0.1	0.9	0.5	1.5	0.0	0.0
86	0.3	0.9	0.0	0.0	1.9	2.7	0.1	0.9	0.5	1.5	0.0	0.0
87	0.3	0.9	0.0	0.0	1.9	2.8	0.1	0.9	0.5	1.6	0.0	0.0
88	0.2	1.0	0.0	0.0	1.9	2.9	0.1	0.9	0.5	1.6	0.0	0.0
89	0.2	1.0	0.0	0.0	1.9	2.8	0.1	0.9	0.5	1.6	0.0	0.0
90	0.2	1.0	0.0	0.0	1.9	2.8	0.1	0.9	0.5	1.6	0.0	0.0
91	0.2	1.0	0.0	0.0	1.9	2.8	0.1	0.9	0.5	1.7	0.0	0.0
92	0.2	1.0	0.0	0.0	1.9	2.9	0.1	1.0	0.5	1.7	0.0	0.0
93	0.2	1.0	0.0	0.0	1.9	2.9	0.1	1.0	0.5	1.7	0.0	0.0
94	0.2	1.0	0.0	0.0	1.9	2.8	0.1	1.0	0.5	1.7	0.0	0.0
95	0.2	1.0	0.0	0.0	1.9	2.9	0.1	1.0	0.5	1.7	0.0	0.0
96	0.2	1.0	0.0	0.0	1.9	3.2	0.1	1.0	0.5	1.8	0.0	0.0
97	0.2	1.0	0.0	0.0	1.9	2.9	0.1	1.0	0.5	1.8	0.0	0.0
98	0.2	1.0	0.0	0.0	1.9	3.2	0.1	1.0	0.5	1.8	0.0	0.0
99	0.2	1.0	0.0	0.0	1.9	3.1	0.1	1.0	0.5	1.8	0.0	0.0
100	0.2	1.1	0.0	0.0	1.9	3.1	0.1	1.0	0.5	1.8	0.0	0.0

TABLE 4- 9C: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	0.4	0.0	0.0	0.1	3.4	0.0	0.2	1.5	0.3	0.0	0.0	0.0
2	1.0	0.0	0.0	0.1	8.6	0.0	0.2	2.1	0.8	0.0	0.0	0.0
3	1.5	0.0	0.0	0.1	18.2	0.0	0.5	4.5	1.2	0.0	0.0	0.0
4	1.5	0.0	0.0	0.1	23.8	0.0	0.7	6.4	1.5	0.0	0.0	0.0
5	1.5	0.0	0.0	0.1	27.1	0.0	0.8	7.4	1.8	0.0	0.0	0.0
6	1.4	0.0	0.0	0.1	31.8	0.0	0.9	8.3	1.8	0.0	0.0	0.0
7	0.9	0.0	0.0	0.0	25.8	0.0	1.0	9.0	1.8	0.0	0.0	0.0
8	0.9	0.0	0.0	0.0	22.1	0.0	1.0	8.7	1.8	0.0	0.0	0.0
9	0.9	0.0	0.0	0.1	20.2	0.0	1.1	9.9	1.8	0.0	0.1	0.0
10	0.9	0.0	0.0	0.1	19.1	0.0	1.2	10.9	1.9	0.0	0.1	0.0
11	0.9	0.0	0.0	0.1	18.4	0.0	1.3	12.1	1.9	0.0	0.1	0.0
12	0.9	0.0	0.1	0.1	18.8	0.0	1.5	13.2	2.0	0.0	0.1	0.0
13	0.9	0.0	0.1	0.1	20.2	0.0	1.5	13.9	2.0	0.0	0.1	0.0
14	0.9	0.0	0.1	0.1	21.6	0.0	1.6	14.6	2.0	0.0	0.1	0.0
15	0.9	0.0	0.1	0.1	22.7	0.0	1.7	15.6	2.1	0.0	0.1	0.0
16	0.9	0.0	0.1	0.1	22.7	0.0	1.8	16.1	2.1	0.0	0.2	0.0
17	0.9	0.0	0.1	0.1	23.6	0.0	1.9	16.7	2.1	0.0	0.2	0.0
18	0.9	0.0	0.1	0.1	25.1	0.0	1.9	16.8	2.2	0.0	0.2	0.0
19	0.9	0.0	0.1	0.1	26.4	0.0	1.9	17.2	2.2	0.0	0.2	0.0
20	0.9	0.0	0.1	0.1	27.5	0.0	2.0	17.6	2.2	0.0	0.2	0.0
21	0.9	0.0	0.1	0.1	28.4	0.0	2.1	18.6	2.2	0.0	0.2	0.0
22	0.9	0.0	0.1	0.1	29.9	0.0	2.1	19.3	2.3	0.0	0.2	0.0
23	0.9	0.0	0.1	0.1	30.9	0.0	2.2	19.7	2.3	0.0	0.2	0.0
24	0.9	0.0	0.1	0.1	30.8	0.0	2.2	19.8	2.3	0.0	0.2	0.0
25	0.9	0.0	0.1	0.1	31.5	0.0	2.3	20.3	2.3	0.0	0.2	0.0
26	0.9	0.0	0.1	0.1	32.8	0.0	2.3	20.3	2.4	0.0	0.2	0.0
27	0.9	0.0	0.1	0.1	33.8	0.0	2.3	20.5	2.4	0.0	0.2	0.0
28	0.9	0.0	0.1	0.1	34.4	0.0	2.3	20.7	2.4	0.0	0.2	0.0
29	0.9	0.0	0.1	0.1	36.2	0.0	2.4	21.2	2.4	0.0	0.2	0.0
30	0.9	0.0	0.1	0.1	36.7	0.0	2.4	21.7	2.3	0.0	0.3	0.0
31	0.9	0.0	0.1	0.1	37.2	0.0	2.4	22.0	2.2	0.0	0.3	0.0
32	0.7	0.0	0.1	0.1	37.8	0.0	2.5	22.2	2.0	0.0	0.3	0.0
33	0.5	0.0	0.2	0.1	37.8	0.0	2.5	22.7	1.8	0.0	0.4	0.0
34	0.4	0.0	0.2	0.1	37.5	0.0	2.6	23.0	1.6	0.0	0.5	0.0
35	0.3	0.0	0.2	0.1	37.9	0.0	2.6	23.0	1.5	0.0	0.5	0.0
36	0.3	0.0	0.2	0.1	38.3	0.0	2.6	23.2	1.5	0.0	0.5	0.0
37	0.3	0.0	0.2	0.1	38.6	0.0	2.6	23.3	1.5	0.0	0.5	0.0
38	0.2	0.0	0.2	0.1	38.9	0.0	2.6	23.6	1.5	0.0	0.5	0.0
39	0.2	0.0	0.2	0.1	39.1	0.0	2.6	23.6	1.5	0.0	0.5	0.0
40	0.2	0.0	0.2	0.1	40.0	0.0	2.6	23.7	1.5	0.0	0.5	0.0
41	0.2	0.0	0.2	0.1	40.5	0.0	2.7	24.0	1.5	0.0	0.5	0.0
42	0.2	0.0	0.2	0.1	40.6	0.0	2.7	24.2	1.5	0.0	0.5	0.0
43	0.2	0.0	0.2	0.1	41.1	0.0	2.8	24.5	1.5	0.0	0.5	0.0
44	0.2	0.0	0.2	0.1	41.5	0.0	2.8	24.6	1.5	0.0	0.5	0.0
45	0.2	0.0	0.2	0.1	41.8	0.0	2.8	24.9	1.5	0.0	0.6	0.0
46	0.2	0.0	0.2	0.0	41.9	0.0	2.8	25.4	1.5	0.0	0.6	0.0
47	0.2	0.0	0.2	0.0	42.3	0.0	2.9	25.5	1.5	0.0	0.6	0.0
48	0.2	0.0	0.2	0.1	42.9	0.0	2.9	25.7	1.5	0.0	0.6	0.0
49	0.2	0.0	0.2	0.0	42.9	0.0	3.0	26.4	1.5	0.0	0.6	0.0
50	0.2	0.0	0.2	0.0	43.1	0.0	2.9	26.3	1.5	0.0	0.6	0.0

TABLE 4- 9C: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.2	0.0	0.2	0.0	43.2	0.0	3.0	27.0	1.5	0.0	0.6	0.0
52	0.2	0.0	0.2	0.0	43.2	0.0	3.0	26.7	1.5	0.0	0.6	0.0
53	0.2	0.0	0.2	0.0	43.5	0.0	3.0	26.9	1.5	0.0	0.6	0.0
54	0.2	0.0	0.2	0.0	43.9	0.0	3.0	26.8	1.5	0.0	0.6	0.0
55	0.2	0.0	0.2	0.0	43.8	0.0	3.0	27.0	1.5	0.0	0.6	0.0
56	0.2	0.0	0.2	0.0	44.4	0.0	3.0	27.1	1.5	0.0	0.6	0.0
57	0.2	0.0	0.2	0.0	44.4	0.0	3.1	27.4	1.5	0.0	0.6	0.0
58	0.2	0.0	0.2	0.0	44.6	0.0	3.1	27.6	1.6	0.0	0.6	0.0
59	0.2	0.0	0.2	0.0	44.6	0.0	3.1	27.9	1.6	0.0	0.6	0.0
60	0.2	0.0	0.2	0.0	44.6	0.0	3.1	28.0	1.6	0.0	0.6	0.0
61	0.1	0.0	0.2	0.0	44.5	0.0	3.2	28.3	1.6	0.0	0.6	0.0
62	0.1	0.0	0.2	0.0	44.7	0.0	3.2	28.7	1.6	0.0	0.6	0.0
63	0.1	0.0	0.2	0.0	44.8	0.0	3.2	28.7	1.6	0.0	0.6	0.0
64	0.1	0.0	0.2	0.0	44.7	0.0	3.2	28.9	1.6	0.0	0.6	0.0
65	0.1	0.0	0.2	0.0	44.8	0.0	3.3	29.2	1.6	0.0	0.6	0.0
66	0.1	0.0	0.2	0.0	45.0	0.0	3.3	29.4	1.6	0.0	0.6	0.0
67	0.1	0.0	0.2	0.0	45.3	0.0	3.3	29.5	1.6	0.0	0.6	0.0
68	0.1	0.0	0.2	0.0	45.5	0.0	3.3	29.5	1.6	0.0	0.6	0.0
69	0.1	0.0	0.2	0.0	45.4	0.0	3.3	29.7	1.6	0.0	0.6	0.0
70	0.1	0.0	0.2	0.0	45.5	0.0	3.3	29.7	1.6	0.0	0.6	0.0
71	0.1	0.0	0.2	0.0	45.6	0.0	3.3	29.8	1.6	0.0	0.6	0.0
72	0.1	0.0	0.2	0.0	45.7	0.0	3.4	30.0	1.6	0.0	0.6	0.0
73	0.1	0.0	0.2	0.0	45.8	0.0	3.5	30.1	1.6	0.0	0.6	0.0
74	0.1	0.0	0.2	0.0	45.9	0.0	3.5	30.1	1.6	0.0	0.6	0.0
75	0.1	0.0	0.2	0.0	45.9	0.0	3.5	30.2	1.6	0.0	0.6	0.0
76	0.1	0.0	0.2	0.0	46.1	0.0	3.5	30.6	1.6	0.0	0.6	0.0
77	0.1	0.0	0.2	0.0	46.2	0.0	3.5	30.6	1.6	0.0	0.6	0.0
78	0.1	0.0	0.2	0.0	46.0	0.0	3.5	30.8	1.6	0.0	0.7	0.0
79	0.1	0.0	0.2	0.0	46.0	0.0	3.5	30.9	1.6	0.0	0.7	0.0
80	0.1	0.0	0.2	0.0	46.0	0.0	3.5	31.1	1.6	0.0	0.7	0.0
81	0.1	0.0	0.2	0.0	45.9	0.0	3.5	31.2	1.6	0.0	0.7	0.0
82	0.1	0.0	0.2	0.0	45.7	0.0	3.6	31.6	1.6	0.0	0.7	0.0
83	0.1	0.0	0.2	0.0	45.7	0.0	3.6	31.8	1.6	0.0	0.7	0.0
84	0.1	0.0	0.2	0.0	45.8	0.0	3.6	31.8	1.6	0.0	0.7	0.0
85	0.1	0.0	0.2	0.0	45.8	0.0	3.6	31.9	1.6	0.0	0.7	0.0
86	0.1	0.0	0.2	0.0	45.8	0.0	3.6	32.0	1.6	0.0	0.7	0.0
87	0.1	0.0	0.2	0.0	45.8	0.0	3.6	32.1	1.6	0.0	0.7	0.0
88	0.1	0.0	0.2	0.0	45.9	0.0	3.7	32.3	1.6	0.0	0.7	0.0
89	0.1	0.0	0.2	0.0	45.8	0.0	3.7	32.5	1.6	0.0	0.7	0.0
90	0.1	0.0	0.2	0.0	45.9	0.0	3.7	32.5	1.6	0.0	0.7	0.0
91	0.1	0.0	0.2	0.0	45.9	0.0	3.7	32.7	1.6	0.0	0.7	0.0
92	0.1	0.0	0.2	0.0	45.9	0.0	3.7	32.7	1.6	0.0	0.7	0.0
93	0.1	0.0	0.2	0.0	45.9	0.0	3.7	32.8	1.6	0.0	0.7	0.0
94	0.1	0.0	0.2	0.0	45.9	0.0	3.7	33.0	1.6	0.0	0.7	0.0
95	0.1	0.0	0.2	0.0	45.8	0.0	3.7	32.9	1.6	0.0	0.7	0.0
96	0.1	0.0	0.2	0.0	45.9	0.0	3.7	33.0	1.6	0.0	0.7	0.0
97	0.1	0.0	0.2	0.0	45.8	0.0	3.8	33.1	1.6	0.0	0.7	0.0
98	0.1	0.0	0.2	0.0	45.8	0.0	3.8	33.7	1.6	0.0	0.7	0.0
99	0.1	0.0	0.2	0.0	45.8	0.0	3.8	33.4	1.6	0.0	0.7	0.0
100	0.1	0.0	0.2	0.0	45.8	0.0	3.8	33.5	1.6	0.0	0.7	0.0

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE

TABLE 4-10A: ALLOCATION OF CLAIMS COSTS BY TYPE AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	111.3	0.0	0.0	0.0	2.4	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.5	0.0	0.0	0.0
3	742.8	0.0	0.0	0.0	10.3	0.0	0.0	0.0	16.4	0.0	0.0	0.0	3.6	0.0	0.0	0.1
4	668.0	0.0	0.0	0.0	10.4	0.0	0.0	0.0	22.4	0.0	0.0	0.0	5.9	0.0	0.0	0.5
5	1185.8	0.0	0.0	0.0	11.7	0.0	0.0	0.0	24.6	0.0	0.0	0.0	5.9	0.0	0.0	0.3
6	919.8	0.0	0.0	0.0	5.6	0.0	0.0	0.0	22.6	0.0	0.0	0.0	5.7	0.0	0.0	0.2
7	233.1	0.0	0.0	0.0	6.7	0.0	0.4	0.0	9.6	0.0	0.0	0.0	3.8	0.0	0.0	0.3
8	98.7	0.0	0.0	0.0	1.9	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.8	0.0	0.0	0.1
9	132.5	0.0	0.0	0.0	3.1	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.8	0.0	0.0	0.1
10	186.2	0.0	0.0	0.0	1.8	0.0	0.0	0.0	4.3	0.0	0.0	0.0	1.0	0.0	0.0	0.0
11	101.1	0.0	0.0	0.0	1.8	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.7	0.0	0.0	0.0
12	252.6	0.0	0.0	0.0	2.0	0.0	0.0	0.0	4.7	0.0	0.0	0.0	0.8	0.0	0.0	0.0
13	135.3	0.0	0.0	0.0	2.1	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.7	0.0	0.0	0.0
14	175.2	0.0	0.0	0.0	4.2	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.7	0.0	0.0	0.0
15	145.8	0.0	0.0	0.0	1.3	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.5	0.0	0.0	0.0
16	128.1	0.0	0.0	0.0	3.6	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.8	0.0	0.0	0.0
17	40.7	0.0	0.0	0.0	2.5	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0
18	208.6	0.0	0.0	0.0	1.2	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.7	0.0	0.0	0.0
19	85.4	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.7	0.0	0.0	0.0
20	158.3	0.0	0.0	0.0	1.3	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
21	53.6	0.0	0.0	0.0	1.5	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.4	0.0	0.0	0.0
22	107.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.5	0.0	0.0	0.0
23	33.3	0.0	0.0	0.0	2.2	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.4	0.0	0.0	0.0
24	116.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.4	0.0	0.0	0.0
25	129.7	0.0	0.0	0.0	0.7	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.3	0.0	0.0	0.1
26	19.3	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.2	0.0	0.0	0.0
27	30.2	0.0	0.0	0.0	0.5	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0
28	66.4	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.3	0.0	0.0	0.0
29	62.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0
30	76.4	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.3	0.0	0.0	0.0
31	228.5	0.0	0.0	0.0	1.2	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.3	0.0	0.0	0.0
32	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0
33	75.8	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0
34	4.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0
35	19.1	0.0	0.0	0.0	0.2	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
36	59.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	26.4	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.3	0.0	0.0	0.0
39	16.4	0.0	0.0	0.0	2.6	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
40	0.4	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
41	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	101.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	33.6	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
45	33.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	17.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE

TABLE 4-10A: ALLOCATION OF CLAIMS COSTS BY TYPE AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	15.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	60.4	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74	40.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	15.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE

TABLE 4-10B: ALLOCATION OF CLAIMS COSTS BY TYPE AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	20.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	20.3	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	27.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
33	1.7	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	5.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	25.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
41	0.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	17.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
45	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	36.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
48	72.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	13.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE

TABLE 4-10B: ALLOCATION OF CLAIMS COSTS BY TYPE AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	11.7	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
52	0.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	7.6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	0.9	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	20.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	27.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
63	38.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
64	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
65	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	21.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	102.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
74	10.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	36.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	61.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	15.9	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
93	85.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	5.3	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE

TABLE 4-10C: ALLOCATION OF CLAIMS COSTS BY TYPE AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	58.3	0.0	0.0	0.0	1.6	0.0	0.0	0.0	2.0	0.0	0.3	0.0	0.7	0.0	0.0	0.2
2	91.5	0.0	34.0	0.0	1.2	0.0	0.0	0.0	3.2	0.0	0.3	0.0	0.6	0.0	0.0	0.0
3	245.9	0.0	0.0	0.0	6.3	0.0	0.0	0.0	10.8	0.0	0.0	0.0	1.9	0.0	0.0	0.4
4	382.6	0.0	0.0	0.0	10.4	0.0	0.0	0.0	10.7	0.0	0.0	0.0	2.2	0.0	0.0	0.3
5	427.5	0.0	0.0	0.0	2.1	0.0	0.0	0.0	10.7	0.0	0.0	0.0	1.9	0.0	0.0	0.2
6	473.9	0.0	0.0	0.0	6.3	0.0	0.0	0.0	8.7	0.0	0.0	0.0	1.4	0.0	0.0	0.2
7	54.8	0.0	0.0	0.0	1.9	0.0	0.1	0.0	5.9	0.0	0.3	0.0	1.4	0.0	0.0	0.1
8	6.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.2	0.0	0.0	0.0
9	160.3	0.0	0.0	0.0	0.5	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1
10	243.8	0.0	0.0	0.0	4.4	0.0	0.0	0.0	5.8	0.0	0.0	0.0	0.5	0.0	0.0	0.0
11	259.5	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.6	0.0	0.0	0.3
12	68.4	0.0	0.0	0.0	0.7	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.4	0.0	0.0	0.2
13	51.8	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.4	0.0	0.0	0.3
14	29.9	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.4	0.0	0.0	0.2
15	160.3	0.0	0.0	0.0	0.7	0.0	0.0	0.0	4.3	0.0	0.1	0.0	0.4	0.0	0.0	0.2
16	86.4	0.0	0.0	0.0	3.4	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.4	0.0	0.0	0.2
17	188.9	0.0	0.0	0.0	1.1	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.4	0.0	0.0	0.2
18	75.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.5	0.0	0.0	0.3
19	170.8	0.0	0.0	0.0	1.3	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.4	0.0	0.0	0.2
20	136.6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.5	0.0	0.0	0.1
21	186.3	0.0	0.0	0.0	0.7	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.4	0.0	0.0	0.2
22	54.6	0.0	0.0	0.0	2.2	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.5	0.0	0.0	0.3
23	23.9	0.0	0.0	0.0	3.2	0.0	0.1	0.0	3.3	0.0	0.0	0.0	0.4	0.0	0.0	0.2
24	88.6	0.0	0.0	0.0	0.3	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.4	0.0	0.0	0.2
25	80.1	0.0	0.0	0.0	0.5	0.0	0.2	0.0	3.9	0.0	0.0	0.0	0.5	0.0	0.0	0.3
26	22.5	0.0	0.0	0.0	1.7	0.0	0.1	0.0	1.8	0.0	0.3	0.0	0.4	0.0	0.0	0.1
27	127.7	0.0	0.0	0.0	0.5	0.0	0.0	0.0	4.2	0.0	0.3	0.0	0.3	0.0	0.0	0.2
28	87.9	0.0	0.0	0.0	3.6	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.4	0.0	0.0	0.2
29	22.7	0.0	0.0	0.0	2.8	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.4	0.0	0.0	0.3
30	452.3	0.0	0.0	0.0	3.9	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.4	0.0	0.0	0.2
31	26.9	0.0	0.0	0.0	0.2	0.0	0.3	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0	0.2
32	49.0	0.0	0.0	0.0	1.1	0.0	0.5	0.0	0.8	0.0	0.0	0.0	0.4	0.0	0.0	0.3
33	37.8	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.2	0.0	0.0	0.1
34	16.7	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0	0.1
35	25.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.1
36	6.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0
37	65.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
38	17.2	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0	0.1
39	31.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.2	0.0	0.0	0.1
40	0.2	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1
41	0.6	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1
42	1.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
43	19.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
44	55.4	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
46	84.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1
47	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	29.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.1	0.0	0.0	0.1
49	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE

TABLE 4-10C: ALLOCATION OF CLAIMS COSTS BY TYPE AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.1
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1
53	18.8	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	21.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	41.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	83.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	134.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	30.7	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	4.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74	16.7	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	49.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	15.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	47.5	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87	31.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	6.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	2.5	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	18.7	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE

TABLE 4-11: SUMMARY OF FACILITY/FIRM BANKRUPTCY STATUS BY YEAR AND BY NET WORTH FOR NON-GOVERNMENT OWNED FACILITIES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	FIRM NET WORTH IN 1982 DOLLARS											
	LESS THAN 10 MILLION			10 TO 100 MILLION			100 TO 1000 MILLION			GREATER THAN 1000 MILLION		
		BANKRUPTCIES			BANKRUPTCIES			BANKRUPTCIES			BANKRUPTCIES	
YEAR	SOLVENT FACILITIES	NUMBER	(PERCENT)	SOLVENT FACILITIES	NUMBER	(PERCENT)	SOLVENT FACILITIES	NUMBER	(PERCENT)	SOLVENT FACILITIES	NUMBER	(PERCENT)
1	243.9	11.59	(4.76)	109.8	0.10	(0.09)	223.8	0.48	(0.22)	341.2	0.59	(0.17)
2	232.3	2.86	(1.22)	109.7	0.31	(0.29)	223.3	0.41	(0.19)	340.6	1.21	(0.36)
3	229.4	9.52	(4.14)	109.4	0.55	(0.50)	222.9	0.52	(0.23)	339.4	0.72	(0.22)
4	219.9	27.07	(12.32)	108.9	1.14	(1.04)	222.3	0.66	(0.29)	338.7	0.72	(0.22)
5	192.9	24.14	(12.54)	107.7	1.31	(1.24)	221.7	0.45	(0.20)	337.9	1.10	(0.32)
6	168.7	18.52	(10.98)	106.4	1.66	(1.56)	221.3	1.48	(0.66)	336.9	0.83	(0.25)
7	150.3	17.03	(11.35)	105.4	1.41	(1.38)	220.9	1.07	(0.48)	337.3	0.62	(0.18)
8	133.8	8.76	(6.58)	104.6	0.83	(0.80)	221.2	0.69	(0.31)	339.2	1.21	(0.35)
9	125.5	7.55	(6.03)	105.1	0.86	(0.79)	222.9	0.41	(0.19)	341.5	1.93	(0.57)
10	118.3	5.34	(4.57)	105.3	0.72	(0.69)	224.7	0.34	(0.16)	342.6	0.55	(0.16)
11	113.4	6.72	(5.93)	105.7	0.93	(0.89)	226.4	0.83	(0.35)	345.8	0.76	(0.22)
12	107.1	4.83	(4.54)	105.5	0.55	(0.53)	227.5	0.48	(0.21)	347.6	1.10	(0.32)
13	102.8	4.07	(3.97)	106.0	0.59	(0.55)	229.1	0.48	(0.21)	349.5	0.90	(0.26)
14	99.2	3.76	(3.80)	106.5	0.76	(0.72)	230.4	0.62	(0.27)	351.5	1.69	(0.47)
15	95.8	4.14	(4.34)	106.5	1.07	(1.03)	231.7	0.93	(0.41)	352.6	1.31	(0.37)
16	92.0	3.59	(3.90)	106.1	0.66	(0.62)	232.0	0.62	(0.27)	353.9	1.14	(0.32)
17	88.7	3.14	(3.52)	106.3	0.72	(0.68)	233.6	0.41	(0.18)	355.4	0.59	(0.17)
18	85.9	2.72	(3.17)	106.3	0.69	(0.67)	234.3	0.48	(0.21)	356.9	0.86	(0.25)
19	83.4	2.38	(2.78)	106.1	1.00	(0.97)	235.0	0.41	(0.17)	358.0	0.45	(0.12)
20	81.4	2.62	(3.23)	105.4	1.07	(1.02)	235.9	0.69	(0.29)	359.6	0.97	(0.27)
21	78.9	2.31	(2.94)	104.8	0.69	(0.66)	236.0	0.59	(0.25)	360.1	1.34	(0.38)
22	76.9	2.41	(3.13)	104.7	0.72	(0.71)	236.4	0.86	(0.37)	360.3	0.48	(0.14)
23	74.6	1.79	(2.40)	104.4	0.59	(0.56)	236.4	0.66	(0.28)	361.4	0.86	(0.25)
24	72.9	2.28	(3.15)	104.3	0.90	(0.85)	236.5	0.62	(0.26)	361.6	0.52	(0.15)
25	70.7	1.83	(2.60)	103.8	0.69	(0.67)	236.7	0.48	(0.21)	361.8	1.28	(0.34)
26	68.9	1.69	(2.42)	103.4	0.79	(0.77)	236.8	0.69	(0.30)	361.6	0.93	(0.27)
27	67.2	1.31	(2.01)	103.0	0.66	(0.64)	236.8	0.41	(0.18)	361.8	1.38	(0.39)
28	66.0	1.24	(1.92)	102.6	0.59	(0.59)	236.9	0.62	(0.27)	361.3	1.17	(0.34)
29	64.9	1.21	(1.93)	102.2	0.52	(0.50)	237.0	0.59	(0.25)	360.8	0.34	(0.10)
30	63.7	1.21	(1.88)	102.0	0.55	(0.54)	237.0	0.76	(0.33)	361.2	1.03	(0.28)
31	62.5	1.59	(2.54)	101.6	0.83	(0.84)	236.7	0.62	(0.26)	360.7	0.48	(0.14)
32	61.1	1.45	(2.35)	101.0	0.34	(0.34)	236.6	1.10	(0.47)	360.9	1.28	(0.36)
33	59.7	1.24	(2.09)	100.8	0.55	(0.55)	235.9	0.69	(0.30)	360.2	0.97	(0.27)
34	58.6	0.90	(1.50)	100.4	0.52	(0.53)	235.5	1.17	(0.51)	360.0	1.31	(0.37)
35	57.7	0.76	(1.29)	100.0	0.45	(0.48)	234.7	0.55	(0.23)	359.3	0.52	(0.14)
36	57.0	1.21	(2.11)	99.7	0.45	(0.47)	234.6	0.52	(0.22)	359.1	0.41	(0.11)
37	56.0	1.00	(1.80)	99.5	0.59	(0.57)	234.5	0.34	(0.15)	359.5	0.83	(0.23)
38	55.1	0.83	(1.48)	99.0	0.38	(0.39)	234.5	0.48	(0.21)	359.2	1.17	(0.33)
39	54.4	0.69	(1.25)	99.0	0.59	(0.59)	234.2	0.69	(0.29)	358.6	0.83	(0.24)
40	53.8	0.72	(1.37)	98.7	0.59	(0.60)	233.9	0.31	(0.13)	358.2	0.34	(0.09)
41	53.1	0.93	(1.85)	98.2	0.59	(0.61)	233.9	0.48	(0.20)	358.4	0.79	(0.22)
42	52.3	0.76	(1.41)	97.8	0.52	(0.52)	233.7	0.48	(0.20)	358.0	0.97	(0.27)
43	51.5	0.93	(1.72)	97.3	0.55	(0.58)	233.3	0.79	(0.34)	357.3	1.66	(0.45)
44	50.6	0.38	(0.73)	96.9	0.31	(0.32)	232.9	0.55	(0.23)	356.4	0.69	(0.19)
45	50.3	0.62	(1.25)	96.7	0.48	(0.50)	232.9	0.52	(0.22)	356.3	0.69	(0.20)
46	49.8	0.52	(1.01)	96.3	0.38	(0.41)	232.7	0.31	(0.13)	356.4	0.83	(0.23)
47	49.4	0.76	(1.58)	96.1	0.48	(0.49)	232.8	1.00	(0.42)	356.0	1.24	(0.34)
48	48.6	0.83	(1.86)	95.9	0.55	(0.60)	232.1	0.45	(0.19)	355.2	0.34	(0.10)
49	47.9	0.69	(1.49)	95.4	0.28	(0.27)	232.1	0.93	(0.40)	355.3	0.72	(0.20)
50	47.2	0.38	(0.87)	95.3	0.97	(1.01)	231.4	0.34	(0.15)	355.0	1.48	(0.42)

ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE
(CONTINUED)
TABLE 4-11: SUMMARY OF FACILITY/FIRM BANKRUPTCY STATUS BY YEAR AND BY NET WORTH FOR NON-GOVERNMENT OWNED FACILITIES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	FIRM NET WORTH IN 1982 DOLLARS											
	LESS THAN 10 MILLION			10 TO 100 MILLION			100 TO 1000 MILLION			GREATER THAN 1000 MILLION		
	SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES	
YEAR	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)
51	46.9	0.52	(1.14)	94.5	0.45	(0.49)	231.4	0.86	(0.36)	354.2	1.14	(0.33)
52	46.4	0.52	(1.20)	94.3	0.41	(0.43)	231.5	0.28	(0.11)	354.0	0.45	(0.13)
53	46.2	0.48	(1.11)	94.4	0.41	(0.47)	232.4	0.55	(0.24)	354.5	1.03	(0.30)
54	46.0	0.59	(1.31)	94.4	0.38	(0.42)	233.1	0.28	(0.12)	354.4	0.66	(0.18)
55	45.7	0.45	(1.05)	94.7	0.62	(0.65)	233.9	1.34	(0.56)	355.1	1.59	(0.46)
56	45.7	0.34	(0.75)	94.4	0.52	(0.53)	233.7	0.41	(0.18)	354.9	0.34	(0.10)
57	45.7	0.41	(0.95)	94.4	0.48	(0.51)	234.3	0.21	(0.09)	356.5	1.31	(0.36)
58	45.5	0.52	(1.22)	94.4	0.48	(0.48)	234.9	0.45	(0.20)	356.5	0.86	(0.24)
59	45.1	0.41	(0.87)	94.4	0.38	(0.39)	235.4	0.52	(0.23)	356.9	0.97	(0.27)
60	44.9	0.38	(0.90)	94.4	0.21	(0.23)	235.8	0.38	(0.16)	357.4	0.66	(0.19)
61	44.7	0.52	(1.15)	94.6	0.28	(0.30)	236.2	0.83	(0.35)	357.9	1.55	(0.42)
62	44.2	0.38	(0.88)	94.8	0.41	(0.41)	236.1	0.93	(0.40)	357.7	1.21	(0.34)
63	43.9	0.24	(0.50)	94.9	0.38	(0.41)	236.1	0.41	(0.18)	357.8	0.38	(0.11)
64	43.9	0.38	(0.82)	94.9	0.21	(0.23)	236.6	0.34	(0.14)	358.6	1.17	(0.33)
65	43.7	0.34	(0.89)	95.0	0.52	(0.53)	237.0	0.69	(0.29)	358.8	0.69	(0.19)
66	43.4	0.34	(0.88)	94.7	0.38	(0.39)	237.1	0.45	(0.19)	359.0	1.62	(0.43)
67	43.2	0.48	(1.18)	94.7	0.31	(0.34)	237.7	0.41	(0.17)	358.3	0.55	(0.16)
68	43.0	0.62	(1.52)	94.9	0.45	(0.48)	238.0	0.59	(0.23)	359.0	0.48	(0.13)
69	42.4	0.62	(1.48)	94.8	0.41	(0.44)	237.9	0.41	(0.17)	359.9	1.07	(0.30)
70	42.0	0.14	(0.39)	94.9	0.38	(0.41)	237.8	0.76	(0.32)	359.8	0.34	(0.10)
71	42.0	0.31	(0.76)	94.9	0.21	(0.24)	237.8	0.59	(0.25)	360.7	0.97	(0.27)
72	41.9	0.17	(0.37)	94.8	0.24	(0.24)	237.9	0.62	(0.26)	360.7	0.21	(0.06)
73	42.0	0.41	(0.98)	94.9	0.28	(0.32)	237.9	0.66	(0.27)	361.7	0.79	(0.22)
74	41.8	0.24	(0.61)	95.0	0.41	(0.44)	237.7	0.38	(0.16)	361.6	1.07	(0.29)
75	41.6	0.17	(0.41)	94.8	0.41	(0.41)	237.9	0.59	(0.25)	361.4	0.28	(0.07)
76	41.6	0.21	(0.49)	94.6	0.52	(0.57)	238.0	0.48	(0.20)	361.9	1.55	(0.41)
77	41.4	0.21	(0.53)	94.5	0.28	(0.29)	238.1	0.55	(0.23)	361.1	1.03	(0.29)
78	41.3	0.24	(0.52)	94.4	0.48	(0.53)	238.0	0.45	(0.19)	361.0	1.72	(0.49)
79	41.3	0.14	(0.30)	94.4	0.34	(0.38)	238.2	0.48	(0.21)	360.1	0.48	(0.14)
80	41.4	0.10	(0.26)	94.4	0.52	(0.56)	238.4	0.52	(0.22)	360.3	0.52	(0.15)
81	41.4	0.38	(1.03)	94.2	0.34	(0.37)	238.3	0.52	(0.21)	360.5	1.10	(0.32)
82	41.1	0.38	(0.91)	94.0	0.28	(0.29)	238.4	0.76	(0.32)	360.1	1.55	(0.45)
83	40.9	0.21	(0.50)	93.9	0.28	(0.32)	238.2	0.62	(0.26)	359.6	0.76	(0.22)
84	40.8	0.10	(0.23)	93.9	0.31	(0.35)	238.3	0.38	(0.16)	359.5	0.93	(0.27)
85	40.7	0.17	(0.46)	93.8	0.45	(0.49)	238.5	0.48	(0.21)	359.6	0.62	(0.17)
86	40.6	0.41	(1.14)	93.7	0.38	(0.41)	238.4	0.48	(0.20)	359.8	1.17	(0.34)
87	40.3	0.31	(0.73)	93.7	0.31	(0.34)	238.3	0.62	(0.25)	359.4	0.93	(0.25)
88	40.2	0.07	(0.23)	93.7	0.34	(0.39)	238.2	0.14	(0.06)	359.2	1.10	(0.32)
89	40.1	0.17	(0.50)	93.7	0.34	(0.37)	238.5	0.38	(0.16)	359.0	0.62	(0.18)
90	40.1	0.14	(0.37)	93.6	0.03	(0.04)	238.4	0.31	(0.13)	359.5	0.28	(0.08)
91	39.9	0.21	(0.55)	93.8	0.45	(0.48)	238.8	1.03	(0.42)	360.1	1.03	(0.28)
92	39.9	0.38	(0.99)	93.5	0.55	(0.60)	238.3	0.62	(0.27)	360.0	0.93	(0.26)
93	39.6	0.21	(0.55)	93.2	0.41	(0.47)	238.1	0.55	(0.24)	359.9	1.10	(0.32)
94	39.6	0.24	(0.62)	93.1	0.38	(0.42)	238.1	1.03	(0.43)	359.7	0.76	(0.21)
95	39.4	0.41	(1.03)	93.0	0.38	(0.40)	237.7	0.72	(0.30)	359.6	0.83	(0.22)
96	39.2	0.34	(0.91)	93.0	0.24	(0.25)	237.6	0.38	(0.16)	359.8	0.41	(0.13)
97	38.9	0.17	(0.46)	93.1	0.52	(0.58)	237.9	0.72	(0.31)	359.8	0.17	(0.05)
98	39.0	0.34	(0.85)	92.7	0.41	(0.45)	237.8	0.38	(0.15)	360.2	0.66	(0.18)
99	38.7	0.31	(0.81)	92.6	0.24	(0.25)	237.8	0.28	(0.12)	360.0	1.34	(0.35)
100	38.5	0.34	(0.96)	92.7	0.59	(0.66)	238.1	0.66	(0.27)	359.4	0.86	(0.25)

TABLE 4-12: AVERAGE OCCURRENCE OF RELEASES FOLLOWING YEAR FACILITY OPENS
VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

DETECTION OF RELEASES AT EXISTING FACILITIES:

	WITHIN 50 YEARS AFTER OPENING		WITHIN 75 YEARS AFTER OPENING	
RELEASE TYPE	PROPORTION WITH RELEASE MEAN (STD.ERR)	YEARS AFTER OPENING MEAN (STD.ERR)	PROPORTION WITH RELEASE MEAN (STD.ERR)	YEARS AFTER OPENING MEAN (STD.ERR)
INDICATING PARAMETERS ON-SITE:	0.45 (0.00)	4.6 (0.1)	0.47 (0.00)	6.5 (0.1)
DETECTABLE CONC. ON-SITE :	0.41 (0.00)	7.4 (0.1)	0.43 (0.00)	9.8 (0.1)
TOXIC CONC. ON-SITE :	0.31 (0.00)	7.4 (0.1)	0.34 (0.00)	10.1 (0.2)
TASTE/ODOR OFF-SITE :	0.08 (0.00)	24.9 (0.3)	0.10 (0.00)	30.2 (0.3)
DETECTABLE CONC. OFF-SITE :	0.15 (0.00)	22.9 (0.2)	0.18 (0.00)	27.4 (0.3)
TOXIC CONC. OFF-SITE :	0.12 (0.00)	22.4 (0.3)	0.14 (0.00)	26.6 (0.3)
BATHTUB EFFECT :	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)

DETECTION OF RELEASES AT NEW FACILITIES:

	WITHIN 50 YEARS AFTER OPENING		WITHIN 75 YEARS AFTER OPENING	
RELEASE TYPE	PROPORTION WITH RELEASE MEAN (STD.ERR)	YEARS AFTER OPENING MEAN (STD.ERR)	PROPORTION WITH RELEASE MEAN (STD.ERR)	YEARS AFTER OPENING MEAN (STD.ERR)
INDICATING PARAMETERS ON-SITE:	0.04 (0.00)	35.5 (1.3)	0.07 (0.00)	51.4 (1.2)
DETECTABLE CONC. ON-SITE :	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
TOXIC CONC. ON-SITE :	0.00 (0.00)	32.0 (0.0)	0.00 (0.00)	46.0 (14.0)
TASTE/ODOR OFF-SITE :	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
DETECTABLE CONC. OFF-SITE :	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
TOXIC CONC. OFF-SITE :	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
BATHTUB EFFECT :	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)

```
ELIMINATION OF THIRD-PARTY CLAIMS FROM PCLTF COVERAGE

TABLE  4-13A: CAPITAL AND O&M COSTS: (THOUSANDS OF 1982 DOLLARS)
STATISTICS ARE FOR OBSERVATIONS GENERATED FOR 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS
                                                                                              FRACTION OF TIMES
ACTION                                      OBSERVATIONS   MINIMUM      MEAN     MAXIMUM   UNABLE TO ALLOCATE COST
------                                      ------------   -------      ----     -------   -----------------------
MONITORING:
-----------
INDICATING PARAMETERS ON-SITE       K:              0        0.0        0.0        0.0          0.1747
                                  O&M:          37268        2.7        4.6        6.6

CONSTITUENTS ON-SITE                K:              0        0.0        0.0        0.0          0.3580
                                  O&M:          18183        3.5        5.5        8.3

PLUME DELIN. & TRACKING ON-SITE     K:              0        0.0        0.0        0.0          0.0
                                  O&M:              0        0.0        0.0        0.0

CONSTITUENTS OFF-SITE               K:          12510       25.0       37.6       50.0          0.0
                                  O&M:          12926        1.8        2.4        3.0

PLUME DELIN. & TRACKING OFF-SITE    K:              0        0.0        0.0        0.0          0.0
                                  O&M:              0        0.0        0.0        0.0

RESPONSE:
---------
SURFACE SEALING                     K:          12593        6.5      276.2    17678.4          0.0
                                  O&M:              0        0.0        0.0        0.0

FLUID REMOVAL & TREATMT ON-SITE     K:          12593       41.3      136.9     3837.1          0.0
                                  O&M:          12593       33.0      122.0     5046.8

FLUID REMOVAL & TREATMT OFF-SITE    K:           4806        0.0      248.2     3687.2          0.0
                                  O&M:           4838        0.0      255.2     4872.6

ROUTINE CARE:
-------------
POST-CLOSURE CARE                   K:              0        0.0        0.0        0.0          0.3597
                                  O&M:          27242        0.5        7.8      124.8
------------------------------------------------------------------------------------------------------------------


TABLE  4-13B: GENERATED CLAIMS (THOUSANDS OF 1982 DOLLARS)
STATISTICS ARE FOR OBSERVATIONS GENERATED FOR 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS
                                                                                   FRACTION OF          FRACTION OF
                                                                                   GENERATED CLIAMS     VALID CLAIMS
CLAIMS:                            OBSERVATIONS   MINIMUM       MEAN      MAXIMUM  NOT LEGALLY VALID    NOT COMPENSATED
-------                            ------------   -------       ----      -------  -----------------    ---------------
               PERSONAL INJURY:          2166        4.2    280112.1   10579005.0        0.1919              0.2031
                 REAL PROPERTY:          5368        0.1      1503.7     152721.5        0.2331              0.1235
                 ECONOMIC LOSS:          2866       60.0      5858.0      45265.0        0.2733              0.2007
       NATURAL RESOURCE DAMAGE:          3692      606.7       606.5        606.7        0.0                 0.0
------------------------------------------------------------------------------------------------------------------
```

NO PCLTF

TABLE 5- 1: SUMMARY OF FACILITY POPULATION BY YEAR, PERMIT STATUS, AND QUALIFICATION STATUS
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	OPERATING FACILITIES		CLOSED FACILITIES						
			PERMITTED			NON-PERMITTED			DECONTAMINATED
YEAR	EXISTING	NEW	QUALIFICATION STATUS PENDING	QUALIFIED	UNQUALIFIED	QUALIFICATION STATUS PENDING	QUALIFIED	UNQUALIFIED	
1	938	0	1	0	0	0	0	37	7
2	853	0	6	0	0	0	0	105	19
3	774	0	17	0	0	0	0	162	30
4	685	0	41	0	0	0	0	213	43
5	606	0	67	0	0	0	0	253	56
6	575	3	93	1	0	0	0	253	61
7	547	9	110	3	3	0	0	253	67
8	525	18	117	7	10	0	0	253	70
9	504	26	109	16	26	0	0	253	74
10	486	33	98	24	43	0	0	253	78
11	468	39	87	33	61	0	0	253	81
12	449	45	80	41	75	0	0	253	85
13	432	53	76	49	85	0	0	253	88
14	417	59	71	57	94	0	0	253	90
15	401	63	71	64	102	0	0	253	93
16	387	69	68	71	109	0	0	253	96
17	373	73	65	78	118	0	0	253	98
18	360	77	62	85	125	0	0	253	100
19	347	81	60	91	132	0	0	253	102
20	334	85	57	97	140	0	0	253	105
21	322	88	56	102	146	0	0	253	107
22	311	91	53	108	153	0	0	253	109
23	301	93	49	112	160	0	0	253	111
24	290	95	48	118	165	0	0	253	112
25	280	97	46	123	171	0	0	253	114
26	271	99	43	127	178	0	0	253	115
27	261	100	43	130	183	0	0	253	117
28	252	102	43	134	187	0	0	253	119
29	244	103	41	138	193	0	0	253	120
30	235	104	40	142	197	0	0	253	122
31	227	105	40	146	201	0	0	253	123
32	219	105	39	149	207	0	0	253	124
33	212	106	37	153	211	0	0	253	126
34	205	106	37	156	215	0	0	253	127
35	197	106	36	160	219	0	0	253	129
36	191	106	34	164	224	0	0	253	130
37	185	105	34	167	227	0	0	253	131
38	179	105	33	170	231	0	0	253	132
39	174	104	32	174	235	0	0	253	133
40	168	104	31	177	238	0	0	253	135
41	163	104	31	180	242	0	0	253	136
42	156	103	31	184	244	0	0	253	137
43	151	102	31	187	247	0	0	253	138
44	146	102	30	191	250	0	0	253	139
45	141	101	30	194	253	0	0	253	140
46	137	100	30	197	256	0	0	253	141
47	133	99	28	200	259	0	0	253	142
48	129	98	27	203	262	0	0	253	143
49	125	97	27	207	264	0	0	253	144
50	121	96	26	211	267	0	0	253	145

NO PCLTF
(CONTINUED)
TABLE 5- 1: SUMMARY OF FACILITY POPULATION BY YEAR, PERMIT STATUS, AND QUALIFICATION STATUS
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	OPERATING FACILITIES		CLOSED FACILITIES						
			PERMITTED			NON-PERMITTED			DECONTAMINATED
YEAR	EXISTING	NEW	QUALIFICATION STATUS PENDING	QUALIFIED	UNQUALIFIED	QUALIFICATION STATUS PENDING	QUALIFIED	UNQUALIFIED	
51	117	96	25	214	268	0	0	253	146
52	113	97	26	217	270	0	0	253	147
53	109	98	26	220	272	0	0	253	148
54	106	100	25	223	275	0	0	253	149
55	103	101	25	226	277	0	0	253	149
56	100	102	24	229	279	0	0	253	150
57	97	103	23	232	281	0	0	253	151
58	95	104	22	235	283	0	0	253	152
59	92	105	22	238	285	0	0	253	153
60	90	106	21	241	286	0	0	253	153
61	87	106	21	244	288	0	0	253	154
62	85	106	20	247	290	0	0	253	154
63	83	107	20	249	292	0	0	253	155
64	81	108	20	252	293	0	0	253	155
65	79	108	19	254	294	0	0	253	156
66	77	109	18	257	296	0	0	253	156
67	75	109	18	259	297	0	0	253	157
68	72	109	17	262	298	0	0	253	157
69	70	109	18	265	300	0	0	253	158
70	68	110	18	267	300	0	0	253	159
71	66	110	19	269	302	0	0	253	159
72	65	111	19	271	303	0	0	253	159
73	63	111	18	274	304	0	0	253	159
74	62	111	17	276	306	0	0	253	160
75	61	111	16	279	307	0	0	253	160
76	60	111	14	281	308	0	0	253	161
77	58	110	15	283	309	0	0	253	161
78	56	111	15	285	310	0	0	253	162
79	55	111	15	287	311	0	0	253	162
80	53	111	15	289	312	0	0	253	163
81	52	110	16	291	313	0	0	253	163
82	51	110	16	294	314	0	0	253	163
83	49	111	15	295	315	0	0	253	164
84	48	110	15	297	317	0	0	253	164
85	46	110	15	299	317	0	0	253	165
86	46	110	14	301	319	0	0	253	165
87	44	110	14	303	320	0	0	253	166
88	43	109	14	305	321	0	0	253	166
89	42	109	14	307	322	0	0	253	167
90	42	109	13	309	323	0	0	253	167
91	41	109	13	311	324	0	0	253	168
92	40	108	14	313	325	0	0	253	168
93	39	107	14	315	326	0	0	253	168
94	37	107	15	316	327	0	0	253	169
95	36	107	15	318	327	0	0	253	169
96	35	107	15	320	328	0	0	253	169
97	34	106	15	322	329	0	0	253	170
98	34	106	14	324	330	0	0	253	170
99	33	105	14	326	331	0	0	253	170
100	32	105	13	328	332	0	0	253	171

NO PCLTF

TABLE 5- 2: SUMMARY PCLTF FINANCIAL STATISTICS
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	UNOBLIGATED BALANCE	BALANCE	NON-INTEREST EXPENDITURES	INTEREST PAYMENTS	TAX REVENUE	INTEREST REVENUE
1	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0
33	0.0	0.0	0.0	0.0	0.0	0.0
34	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0
38	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0
41	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0

NO PCLTF
(CONTINUED)
TABLE 5- 2: SUMMARY PCLTF FINANCIAL STATISTICS
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	UNOBLIGATED BALANCE	BALANCE	NON-INTEREST EXPENDITURES	INTEREST PAYMENTS	TAX REVENUE	INTEREST REVENUE
51	0.0	0.0	0.0	0.0	0.0	0.0
52	0.0	0.0	0.0	0.0	0.0	0.0
53	0.0	0.0	0.0	0.0	0.0	0.0
54	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0
56	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	0.0	0.0	0.0	0.0	0.0
58	0.0	0.0	0.0	0.0	0.0	0.0
59	0.0	0.0	0.0	0.0	0.0	0.0
60	0.0	0.0	0.0	0.0	0.0	0.0
61	0.0	0.0	0.0	0.0	0.0	0.0
62	0.0	0.0	0.0	0.0	0.0	0.0
63	0.0	0.0	0.0	0.0	0.0	0.0
64	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0
66	0.0	0.0	0.0	0.0	0.0	0.0
67	0.0	0.0	0.0	0.0	0.0	0.0
68	0.0	0.0	0.0	0.0	0.0	0.0
69	0.0	0.0	0.0	0.0	0.0	0.0
70	0.0	0.0	0.0	0.0	0.0	0.0
71	0.0	0.0	0.0	0.0	0.0	0.0
72	0.0	0.0	0.0	0.0	0.0	0.0
73	0.0	0.0	0.0	0.0	0.0	0.0
74	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0
76	0.0	0.0	0.0	0.0	0.0	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	0.0	0.0	0.0	0.0	0.0
79	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0
81	0.0	0.0	0.0	0.0	0.0	0.0
82	0.0	0.0	0.0	0.0	0.0	0.0
83	0.0	0.0	0.0	0.0	0.0	0.0
84	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	0.0	0.0	0.0	0.0	0.0
87	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	0.0	0.0	0.0	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0	0.0
91	0.0	0.0	0.0	0.0	0.0	0.0
92	0.0	0.0	0.0	0.0	0.0	0.0
93	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0
96	0.0	0.0	0.0	0.0	0.0	0.0
97	0.0	0.0	0.0	0.0	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0
99	0.0	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0

NO PCLTF

TABLE 5- 3: SUMMARY OF PCLTF BALANCE
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	FUND BALANCE					UNOBLIGATED FUND BALANCE				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
1	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
2	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
3	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
4	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
5	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
6	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
7	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
8	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
9	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
10	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
11	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
12	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
13	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
14	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
15	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
16	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
17	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
18	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
19	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
20	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
21	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
22	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
23	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
24	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
25	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
26	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
27	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
28	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
29	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
30	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
31	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
32	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
33	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
34	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
35	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
36	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
37	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
38	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
39	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
40	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
41	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
42	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
43	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
44	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
45	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
46	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
47	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
48	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
49	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
50	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0

```
NO PCLTF
(CONTINUED)
TABLE  5- 3: SUMMARY OF PCLTF BALANCE
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS
                                    FUND BALANCE                                         UNOBLIGATED FUND BALANCE

  YEAR        10TH %     MEAN  (STD.ERR)    MEDIAN    90TH %          10TH %    MEAN  (STD.ERR)    MEDIAN    90TH %
  ----        ------     ----  ---------    ------    ------          ------    ----  ---------    ------    ------
   51           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   52           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   53           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   54           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   55           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   56           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   57           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   58           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   59           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   60           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
-------------------------------------------------------------------------------------------------------------------
   61           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   62           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   63           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   64           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   65           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   66           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   67           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   68           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   69           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   70           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
-------------------------------------------------------------------------------------------------------------------
   71           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   72           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   73           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   74           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   75           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   76           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   77           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   78           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   79           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   80           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
-------------------------------------------------------------------------------------------------------------------
   81           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   82           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   83           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   84           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   85           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   86           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   87           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   88           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   89           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   90           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
-------------------------------------------------------------------------------------------------------------------
   91           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   92           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   93           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   94           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   95           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   96           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   97           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   98           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
   99           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
  100           0.0       0.0  (    0.0)      0.0       0.0             0.0      0.0  (    0.0)      0.0       0.0
-------------------------------------------------------------------------------------------------------------------
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NO PCLTF

TABLE 5- 4: SUMMARY OF PCLTF TAX REVENUES, AND TOTAL MONITORING, CARE, RESPONSE, AND CLAIMS EXPENDITURES
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	TAX REVENUES					MONITORING, CARE, RESPONSE, AND CLAIMS PCLTF EXPENDITURES				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
1	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
2	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
3	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
4	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
5	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
6	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
7	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
8	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
9	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
10	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
11	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
12	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
13	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
14	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
15	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
16	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
17	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
18	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
19	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
20	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
21	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
22	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
23	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
24	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
25	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
26	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
27	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
28	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
29	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
30	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
31	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
32	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
33	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
34	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
35	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
36	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
37	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
38	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
39	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
40	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
41	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
42	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
43	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
44	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
45	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
46	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
47	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
48	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
49	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
50	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0

NO PCLTF
(CONTINUED)
TABLE 5- 4: SUMMARY OF PCLTF TAX REVENUES, AND TOTAL MONITORING, CARE, RESPONSE, AND CLAIMS EXPENDITURES
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	TAX REVENUES					MONITORING, CARE, RESPONSE, AND CLAIMS PCLTF EXPENDITURES				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
51	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
52	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
53	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
54	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
55	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
56	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
57	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
58	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
59	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
60	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
61	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
62	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
63	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
64	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
65	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
66	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
67	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
68	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
69	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
70	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
71	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
72	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
73	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
74	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
75	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
76	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
77	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
78	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
79	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
80	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
81	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
82	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
83	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
84	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
85	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
86	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
87	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
88	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
89	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
90	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
91	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
92	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
93	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
94	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
95	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
96	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
97	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
98	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
99	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
100	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0

NO PCLTF

TABLE 5- 5: SUMMARY OF PCLTF INTEREST REVENUES AND PAYMENTS
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	INTEREST REVENUES					INTEREST PAYMENTS				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
1	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
2	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
3	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
4	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
5	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
6	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
7	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
8	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
9	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
10	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
11	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
12	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
13	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
14	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
15	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
16	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
17	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
18	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
19	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
20	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
21	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
22	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
23	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
24	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
25	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
26	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
27	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
28	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
29	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
30	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
31	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
32	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
33	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
34	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
35	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
36	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
37	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
38	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
39	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
40	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
41	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
42	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
43	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
44	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
45	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
46	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
47	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
48	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
49	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
50	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0

NO PCLTF
(CONTINUED)
TABLE 5- 5: SUMMARY OF PCLTF INTEREST REVENUES AND PAYMENTS
MILLIONS OF CURRENT YEAR DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	INTEREST REVENUES					INTEREST PAYMENTS				
YEAR	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %	10TH %	MEAN	(STD.ERR)	MEDIAN	90TH %
51	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
52	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
53	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
54	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
55	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
56	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
57	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
58	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
59	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
60	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
61	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
62	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
63	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
64	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
65	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
66	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
67	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
68	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
69	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
70	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
71	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
72	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
73	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
74	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
75	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
76	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
77	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
78	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
79	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
80	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
81	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
82	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
83	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
84	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
85	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
86	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
87	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
88	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
89	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
90	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
91	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
92	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
93	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
94	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
95	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
96	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
97	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
98	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
99	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
100	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0

NO PCLTF

TABLE 5- 6: SUMMARY OF ANNUAL PCLTF EXPENDITURES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	MONITORING		RESPONSE		POST-CLOSURE CARE		CLAIMS		INTEREST PAYMENTS	
YEAR	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)
1	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
2	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
3	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
4	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
5	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
6	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
7	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
8	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
9	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
10	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
11	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
12	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
13	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
14	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
15	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
16	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
17	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
18	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
19	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
20	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
21	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
22	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
23	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
24	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
25	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
26	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
27	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
28	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
29	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
30	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
31	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
32	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
33	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
34	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
35	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
36	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
37	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
38	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
39	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
40	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
41	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
42	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
43	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
44	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
45	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
46	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
47	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
48	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
49	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
50	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)

NO PCLTF
(CONTINUED)
TABLE 5- 6: SUMMARY OF ANNUAL PCLTF EXPENDITURES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE BASED ON 29 ITERATIONS

	MONITORING		RESPONSE		POST-CLOSURE CARE		CLAIMS		INTEREST PAYMENTS	
YEAR	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)	MEAN	(STD.ERR)
51	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
52	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
53	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
54	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
55	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
56	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
57	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
58	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
59	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
60	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
61	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
62	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
63	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
64	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
65	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
66	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
67	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
68	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
69	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
70	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
71	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
72	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
73	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
74	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
75	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
76	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
77	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
78	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
79	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
80	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
81	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
82	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
83	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
84	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
85	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
86	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
87	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
88	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
89	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
90	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
91	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
92	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
93	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
94	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
95	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
96	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
97	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
98	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
99	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
100	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)

NO PCLTF

TABLE 5- 7A: FREQUENCY OF RELEASES AT FACILITIES
X = EXPECTED RELEASES; S = SIMULATED RELEASES; D = DETECTED RELEASES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

YEARS	IP ON			DETECTABLE ON			TOXIC ON			TASTE/ODOR			DETECTABLE OFF			TOXIC OFF			BATHTUB		
	X	S	D	X	S	D	X	S	D	X	S	D	X	S	D	X	S	D	X	S	D
< 1	472	472	--	458	458	--	373	373	--	54	54	--	70	70	--	60	60	--	0	0	--
1 - 10	60	59	400	71	69	331	65	64	259	31	30	42	41	40	87	34	33	69	0	0	0
11 - 20	14	13	11	35	32	25	31	28	17	28	27	18	38	37	31	33	31	23	0	0	0
21 - 30	11	9	7	29	26	16	26	24	12	24	22	15	34	31	26	27	24	17	0	0	0
31 - 40	11	10	6	26	24	10	21	18	8	20	11	7	31	14	9	24	14	8	0	0	0
41 - 50	11	10	4	22	19	6	21	17	5	17	6	4	29	9	4	20	7	4	0	0	0
51 - 60	12	10	4	20	17	4	19	16	4	13	5	2	25	9	2	18	6	2	0	0	0
61 - 70	9	8	3	14	12	3	14	12	3	10	5	3	19	7	3	14	5	2	0	0	0
71 - 80	10	8	3	12	10	2	13	10	2	7	4	2	13	5	2	10	4	1	0	0	0
81 - 90	9	8	3	8	7	2	9	7	1	5	3	2	8	4	2	6	3	1	0	0	0
91 -100	9	8	3	7	6	1	8	6	1	3	2	1	5	2	1	4	2	1	0	0	0
101 -150	32	--	--	23	--	--	27	--	--	4	--	--	5	--	--	4	--	--	0	--	--
>150	21	--	--	17	--	--	16	--	--	2	--	--	1	--	--	1	--	--	0	--	--
TOTAL	681	615	444	742	680	400	643	575	312	218	169	96	319	228	167	255	189	128	0	0	0

NO PCLTF

TABLE 5- 7B: FREQUENCY OF RELEASES AT FACILITIES WITH QUALIFICATION STATUS PENDING
S = SIMULATED RELEASES; D = DETECTED RELEASES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

	IP ON		DETECTABLE ON		TOXIC ON		TASTE/ODOR		DETECTABLE OFF		TOXIC OFF		BATHTUB	
YEARS	S	D	S	D	S	D	S	D	S	D	S	D	S	D
1 - 10	52	280	58	228	53	178	23	29	31	61	26	49	0	0
11 - 20	7	7	16	15	16	11	13	9	18	16	15	11	0	0
21 - 30	3	4	10	8	9	6	8	6	11	9	9	6	0	0
31 - 40	3	3	6	5	5	4	3	2	4	3	4	3	0	0
41 - 50	2	2	3	3	4	2	1	1	2	1	1	1	0	0
51 - 60	2	2	2	2	3	2	1	1	1	0	1	0	0	0
61 - 70	1	1	1	1	2	1	1	1	1	1	1	0	0	0
71 - 80	1	1	1	1	1	1	0	0	1	0	0	0	0	0
81 - 90	1	1	1	1	1	0	0	0	0	0	0	0	0	0
91 -100	1	1	0	0	1	0	0	0	0	0	0	0	0	0
TOTAL	73	302	98	264	95	205	50	49	69	91	57	70	0	0

NO PCLTF

TABLE 5- 7C: FREQUENCY OF RELEASES AT QUALIFIED FACILITIES
S = SIMULATED RELEASES; D = DETECTED RELEASES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

	IP ON		DETECTABLE ON		TOXIC ON		TASTE/ODOR		DETECTABLE OFF		TOXIC OFF		BATHTUB	
YEARS	S	D	S	D	S	D	S	D	S	D	S	D	S	D
1 - 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 - 20	2	1	2	1	2	0	1	1	2	1	1	0	0	0
21 - 30	3	2	4	1	4	1	2	1	3	1	2	1	0	0
31 - 40	3	2	6	2	5	2	2	2	3	2	3	1	0	0
41 - 50	4	1	5	1	5	1	2	1	3	2	3	1	0	0
51 - 60	5	2	5	1	5	1	2	1	4	1	3	1	0	0
61 - 70	4	1	4	1	4	1	2	1	3	1	2	1	0	0
71 - 80	4	1	4	1	4	1	1	1	2	1	1	0	0	0
81 - 90	4	1	3	1	3	0	2	1	2	1	1	0	0	0
91 -100	5	2	3	0	3	0	1	1	1	1	1	1	0	0
TOTAL	34	13	36	9	35	7	15	10	23	11	17	6	0	0

NO PCLTF

TABLE 5- 7D: FREQUENCY OF RELEASES AT UNQUALIFIED FACILITIES
S = SIMULATED RELEASES; D = DETECTED RELEASES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

	IP ON		DETECTABLE ON		TOXIC ON		TASTE/ODOR		DETECTABLE OFF		TOXIC OFF		BATHTUB	
YEARS	S	D	S	D	S	D	S	D	S	D	S	D	S	D
1 - 10	7	121	11	102	11	81	7	13	9	26	7	21	0	0
11 - 20	4	3	14	9	11	5	12	8	17	15	15	11	0	0
21 - 30	3	2	12	6	11	4	12	8	17	15	14	10	0	0
31 - 40	4	1	11	4	9	3	5	3	7	5	7	5	0	0
41 - 50	4	1	10	1	9	2	3	2	4	2	4	2	0	0
51 - 60	4	1	9	1	8	1	2	1	3	1	3	1	0	0
61 - 70	3	1	6	1	6	1	2	1	3	1	2	0	0	0
71 - 80	3	1	4	1	4	0	2	1	2	1	2	1	0	0
81 - 90	3	1	3	0	3	0	1	1	2	1	1	0	0	0
91 -100	2	0	3	0	2	0	1	0	1	0	1	0	0	0
TOTAL	37	132	83	125	74	97	47	38	65	67	56	51	0	0

NO PCLTF

TABLE 5- 8A: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
1	4.59	0.00	0.01	0.0	0.0	0.0	0.0
2	4.84	6.23	0.06	113.01	2.53	2.63	0.52
3	6.03	35.54	0.13	960.79	10.85	18.36	3.64
4	5.14	53.84	0.33	793.65	10.85	25.28	6.46
5	4.84	72.70	0.53	1206.33	12.87	27.04	6.15
6	4.32	88.62	0.71	910.16	6.17	23.19	6.00
7	2.79	78.97	0.81	236.39	9.26	9.73	4.00
8	2.70	69.66	0.83	133.17	2.44	5.48	0.94
9	2.61	60.55	0.75	121.71	3.12	5.37	0.82
10	2.49	49.83	0.67	184.18	1.79	5.83	1.07
11	2.39	40.14	0.61	65.74	1.66	3.87	0.67
12	2.33	38.23	0.55	253.77	2.28	3.14	0.94
13	2.26	38.42	0.53	140.96	3.06	3.89	0.73
14	2.19	37.26	0.50	175.86	4.59	2.69	0.79
15	2.13	36.35	0.50	145.89	1.28	6.16	0.56
16	2.08	34.89	0.47	140.75	1.77	2.59	0.75
17	2.02	34.64	0.45	88.27	2.58	1.84	0.52
18	1.95	33.32	0.43	209.32	1.28	4.50	0.73
19	1.92	33.51	0.42	105.04	1.34	1.98	0.73
20	1.87	31.92	0.39	165.67	1.27	4.10	0.48
21	1.83	30.92	0.39	147.55	1.53	5.05	0.50
22	1.78	29.69	0.38	95.36	0.52	2.45	0.40
23	1.73	28.28	0.34	38.15	2.16	2.47	0.36
24	1.68	27.61	0.34	121.87	1.29	3.40	0.46
25	1.63	26.99	0.32	139.46	0.93	2.74	0.36
26	1.59	26.01	0.31	18.77	0.51	0.57	0.21
27	1.57	25.08	0.29	34.98	0.54	0.70	0.36
28	1.53	24.61	0.30	66.41	0.37	0.46	0.25
29	1.50	24.04	0.30	58.81	0.57	0.78	0.29
30	1.45	23.92	0.30	76.37	2.15	0.85	0.23
31	1.45	23.72	0.30	228.55	1.16	2.42	0.29
32	1.40	22.36	0.29	0.29	0.34	0.24	0.13
33	1.35	21.66	0.27	76.08	0.56	0.41	0.25
34	1.33	21.11	0.26	4.30	0.01	1.63	0.06
35	1.30	20.49	0.24	19.06	0.54	1.94	0.13
36	1.27	19.90	0.23	95.13	0.03	2.19	0.06
37	1.24	19.20	0.23	0.0	0.08	0.07	0.04
38	1.21	18.70	0.23	16.97	0.39	0.68	0.29
39	1.18	18.52	0.24	79.46	2.68	2.29	0.19
40	1.16	17.83	0.25	0.0	0.04	0.31	0.10
41	1.14	17.03	0.25	0.40	0.03	0.03	0.02
42	1.10	16.60	0.26	0.0	0.00	0.01	0.04
43	1.08	15.48	0.25	101.63	0.04	0.0	0.02
44	1.05	14.82	0.24	28.65	0.13	0.10	0.08
45	1.03	14.42	0.24	33.59	1.24	0.31	0.04
46	1.01	13.85	0.23	3.50	0.01	0.0	0.06
47	0.98	13.70	0.21	0.0	0.05	0.01	0.04
48	0.96	13.15	0.21	19.54	0.04	0.05	0.04
49	0.94	12.97	0.21	0.25	0.01	0.01	0.04
50	0.92	12.75	0.19	0.0	0.00	0.31	0.0

NO PCLTF

TABLE 5- 8A: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
51	0.90	12.37	0.20	0.14	0.06	0.07	0.04
52	0.90	12.18	0.21	0.0	0.0	0.0	0.0
53	0.88	11.60	0.21	0.0	0.0	0.0	0.0
54	0.87	11.16	0.21	16.36	0.11	0.35	0.04
55	0.88	11.09	0.21	8.46	0.01	0.63	0.02
56	0.85	10.29	0.20	0.0	0.01	0.05	0.02
57	0.84	9.78	0.19	0.0	0.27	0.07	0.0
58	0.84	9.65	0.19	0.14	0.00	0.0	0.04
59	0.83	9.35	0.19	0.0	0.00	0.07	0.02
60	0.82	9.28	0.19	0.01	0.00	0.0	0.02
61	0.81	8.88	0.19	32.58	0.01	0.31	0.04
62	0.80	8.63	0.19	0.0	0.01	0.07	0.02
63	0.80	8.38	0.19	0.0	0.03	0.0	0.02
64	0.79	8.43	0.18	60.35	0.29	0.0	0.02
65	0.78	8.24	0.17	0.94	0.03	0.01	0.06
66	0.78	8.03	0.15	0.0	0.01	0.0	0.02
67	0.77	7.87	0.15	0.0	1.51	1.88	0.02
68	0.76	7.55	0.13	8.15	0.00	0.31	0.02
69	0.75	7.38	0.14	0.37	0.02	0.02	0.04
70	0.75	7.28	0.15	0.0	0.00	0.0	0.0
71	0.74	7.00	0.16	0.01	0.00	0.03	0.04
72	0.74	6.80	0.14	0.0	0.00	0.0	0.02
73	0.73	6.83	0.14	5.83	0.07	0.39	0.06
74	0.72	6.35	0.13	40.66	0.16	0.0	0.02
75	0.72	6.31	0.13	0.0	0.0	0.0	0.0
76	0.70	5.97	0.11	0.0	0.00	0.0	0.0
77	0.69	5.78	0.12	0.0	0.0	0.0	0.0
78	0.69	5.70	0.12	0.0	0.0	0.0	0.0
79	0.69	5.65	0.13	62.28	0.00	0.0	0.02
80	0.68	5.53	0.13	0.0	0.0	0.0	0.0
81	0.68	5.33	0.14	0.0	0.00	0.0	0.02
82	0.67	5.23	0.13	0.0	0.01	0.0	0.0
83	0.67	4.98	0.13	0.0	0.0	0.0	0.02
84	0.66	4.87	0.12	0.0	0.0	0.0	0.0
85	0.65	4.67	0.12	0.36	0.02	0.01	0.02
86	0.65	4.60	0.12	0.0	0.0	0.0	0.0
87	0.64	4.49	0.12	0.0	0.00	0.0	0.02
88	0.63	4.32	0.12	0.0	0.0	0.0	0.02
89	0.63	4.13	0.11	0.0	0.0	0.0	0.0
90	0.63	4.02	0.11	0.0	0.0	0.0	0.0
91	0.62	3.88	0.10	0.0	0.0	0.0	0.0
92	0.62	3.78	0.11	0.0	0.0	0.0	0.0
93	0.61	3.62	0.10	0.02	0.01	0.0	0.04
94	0.61	3.78	0.12	0.0	0.03	0.07	0.02
95	0.60	3.59	0.12	0.0	0.03	0.03	0.0
96	0.60	3.44	0.12	1.88	0.01	0.10	0.02
97	0.60	3.76	0.12	0.93	0.05	0.05	0.02
98	0.59	3.59	0.12	0.0	0.0	0.0	0.0
99	0.59	3.51	0.11	0.0	0.0	0.0	0.0
100	0.58	3.27	0.10	0.0	0.0	0.0	0.0

NO PCLTF

TABLE 5- 8B: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.00	0.0	0.01	0.0	0.0	0.0	0.0
7	0.01	0.0	0.03	0.0	0.0	0.0	0.0
8	0.03	0.0	0.06	0.0	0.0	0.0	0.0
9	0.08	0.0	0.13	0.0	0.0	0.0	0.0
10	0.12	0.01	0.19	0.0	0.0	0.0	0.0
11	0.16	0.13	0.25	0.0	0.0	0.0	0.0
12	0.20	0.14	0.32	0.0	0.0	0.0	0.0
13	0.24	0.13	0.39	10.07	0.00	0.31	0.02
14	0.28	0.25	0.44	0.06	0.01	0.01	0.04
15	0.31	0.27	0.49	0.13	0.13	0.67	0.02
16	0.34	0.35	0.54	0.13	0.05	0.01	0.04
17	0.38	0.81	0.58	20.61	0.04	0.63	0.02
18	0.41	0.70	0.64	0.0	0.01	0.34	0.0
19	0.43	1.26	0.68	0.0	0.00	0.94	0.02
20	0.46	1.19	0.72	25.61	0.14	0.38	0.04
21	0.49	1.22	0.76	20.28	0.38	0.05	0.10
22	0.51	1.41	0.79	0.03	0.04	1.57	0.04
23	0.53	1.17	0.83	6.55	0.00	0.0	0.04
24	0.55	1.44	0.87	0.04	0.01	0.33	0.02
25	0.58	1.13	0.90	0.0	0.01	0.0	0.02
26	0.59	1.19	0.92	1.22	0.37	0.65	0.08
27	0.61	1.20	0.95	0.0	0.06	0.03	0.06
28	0.63	1.29	0.96	10.14	0.00	0.05	0.02
29	0.64	1.22	1.00	31.56	0.00	0.96	0.04
30	0.66	1.74	1.02	8.14	0.30	0.67	0.04
31	0.67	1.51	1.04	0.0	0.07	0.09	0.0
32	0.68	1.53	1.04	27.12	0.26	0.07	0.10
33	0.67	2.08	1.04	0.61	0.20	0.20	0.08
34	0.65	1.84	1.01	0.38	0.02	0.02	0.08
35	0.65	2.00	0.99	5.48	0.07	0.10	0.04
36	0.63	2.15	0.98	0.01	0.03	0.11	0.06
37	0.63	2.31	0.97	337.64	0.02	1.88	0.04
38	0.62	2.29	0.95	0.08	0.04	0.01	0.02
39	0.60	2.19	0.94	0.0	0.04	1.26	0.02
40	0.60	2.22	0.93	7.37	0.01	0.07	0.08
41	0.59	2.72	0.91	2.49	0.40	0.05	0.13
42	0.58	2.78	0.91	0.0	0.04	0.01	0.04
43	0.57	2.85	0.89	7.26	0.03	0.33	0.02
44	0.57	2.87	0.89	18.32	0.12	0.65	0.10
45	0.55	2.91	0.89	4.93	0.02	0.01	0.10
46	0.55	2.94	0.89	0.0	0.01	1.90	0.08
47	0.55	2.90	0.90	36.40	0.05	0.31	0.02
48	0.54	3.15	0.90	13.12	0.07	0.67	0.10
49	0.54	3.11	0.90	0.0	0.00	0.0	0.0
50	0.54	3.27	0.90	13.60	1.13	0.68	0.06

NO PCLTF

TABLE 5- 8B: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
51	0.55	3.23	0.92	18.38	0.37	0.07	0.08
52	0.54	3.67	0.91	0.17	0.12	0.38	0.08
53	0.54	3.52	0.92	91.02	1.98	1.89	0.04
54	0.54	3.50	0.92	0.03	0.00	0.0	0.02
55	0.54	3.73	0.91	8.02	0.02	0.98	0.06
56	0.53	3.84	0.92	0.88	0.07	0.0	0.02
57	0.54	3.79	0.93	3.25	0.03	0.13	0.02
58	0.54	3.76	0.94	0.0	0.01	1.56	0.0
59	0.53	4.12	0.95	85.84	0.00	0.63	0.06
60	0.53	3.68	0.95	0.0	0.01	0.0	0.02
61	0.54	3.62	0.95	0.0	0.0	0.0	0.0
62	0.54	3.92	0.96	5.48	0.21	0.15	0.06
63	0.53	4.21	0.97	6.90	0.07	0.05	0.06
64	0.54	4.65	0.98	1.19	0.21	0.14	0.10
65	0.53	4.68	0.99	0.0	1.93	0.44	0.02
66	0.53	4.61	0.99	2.72	0.08	0.0	0.06
67	0.53	4.62	1.00	0.0	0.07	0.0	0.02
68	0.53	4.54	1.01	0.0	0.00	0.09	0.0
69	0.53	4.39	1.01	0.0	0.0	0.0	0.0
70	0.52	4.51	1.00	11.51	0.05	1.88	0.04
71	0.53	4.45	1.01	0.0	0.0	0.0	0.0
72	0.52	4.61	1.01	0.0	0.00	0.05	0.0
73	0.52	4.56	1.00	0.0	0.01	0.01	0.04
74	0.52	4.68	1.01	10.90	0.07	0.33	0.06
75	0.52	4.63	1.01	36.56	0.01	0.31	0.02
76	0.52	4.66	1.01	0.0	0.00	0.0	0.04
77	0.52	4.66	1.01	2.67	0.20	0.05	0.02
78	0.52	4.75	1.01	10.28	0.01	0.31	0.02
79	0.52	4.85	1.01	0.00	0.29	0.31	0.02
80	0.51	4.93	1.01	5.73	0.23	0.11	0.04
81	0.51	4.93	1.00	56.48	0.01	0.03	0.02
82	0.51	4.91	1.01	0.0	0.00	0.0	0.0
83	0.51	4.91	1.00	0.0	0.00	0.34	0.0
84	0.51	4.79	1.00	0.0	0.0	0.0	0.0
85	0.51	4.80	1.00	0.0	0.02	0.03	0.02
86	0.51	4.81	1.00	1.15	0.00	0.0	0.02
87	0.51	4.83	1.00	0.0	0.02	0.02	0.0
88	0.51	4.90	0.99	57.94	0.01	0.67	0.06
89	0.50	4.93	0.98	0.0	0.0	0.0	0.0
90	0.50	4.94	0.99	0.0	0.01	0.33	0.0
91	0.51	5.24	0.98	61.59	0.06	0.35	0.08
92	0.50	5.18	0.98	7.28	0.90	0.44	0.02
93	0.50	5.20	0.98	85.37	0.00	1.56	0.02
94	0.50	5.18	0.97	0.0	0.02	0.31	0.0
95	0.49	5.18	0.97	0.01	0.00	0.0	0.02
96	0.49	5.08	0.97	0.01	0.0	0.0	0.02
97	0.50	5.16	0.97	0.0	0.01	0.01	0.02
98	0.50	5.33	0.97	0.0	0.02	0.31	0.02
99	0.50	5.33	0.98	22.22	2.96	0.0	0.08
100	0.50	5.35	0.98	0.0	0.03	0.37	0.02

NO PCLTF

TABLE 5- 8C: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
1	0.48	5.16	0.30	115.55	1.90	3.05	0.92
2	1.02	10.41	0.79	165.67	1.03	3.42	0.59
3	1.53	22.73	1.24	307.56	6.37	10.54	2.28
4	1.65	30.83	1.59	620.89	10.84	12.33	2.43
5	1.58	35.78	1.88	427.60	1.97	11.15	2.07
6	1.45	42.08	1.85	519.71	6.40	9.40	1.59
7	0.97	36.07	1.83	97.72	1.30	7.92	1.59
8	0.96	32.18	1.84	1.65	0.36	0.43	0.23
9	0.97	31.13	1.90	176.55	0.58	3.09	0.31
10	0.99	31.09	1.98	245.95	4.48	5.89	0.48
11	1.03	31.81	2.07	503.61	1.64	4.06	0.88
12	1.06	33.93	2.14	347.28	0.85	5.51	0.52
13	1.07	35.71	2.18	63.71	0.57	3.23	0.65
14	1.07	38.10	2.21	84.87	1.00	1.58	0.52
15	1.09	40.12	2.25	269.74	4.56	7.28	0.63
16	1.08	41.14	2.29	83.46	4.88	4.08	0.65
17	1.09	42.74	2.33	325.89	1.49	9.41	0.61
18	1.09	44.32	2.36	76.29	5.64	4.25	0.73
19	1.11	45.97	2.39	251.01	1.33	4.81	0.65
20	1.11	47.44	2.44	206.56	1.16	4.64	0.71
21	1.13	49.22	2.47	178.75	2.29	3.69	0.54
22	1.13	51.50	2.50	85.25	3.40	4.43	0.79
23	1.13	53.04	2.53	82.87	4.47	3.68	0.61
24	1.13	53.28	2.55	92.43	0.32	3.40	0.54
25	1.13	55.04	2.58	146.78	2.54	4.45	0.82
26	1.14	56.37	2.61	176.62	2.19	4.76	0.59
27	1.15	57.72	2.63	170.89	1.28	6.32	0.48
28	1.14	58.53	2.63	95.43	3.99	1.87	0.59
29	1.14	60.81	2.64	88.79	4.26	4.83	0.63
30	1.14	61.58	2.63	484.05	4.05	4.54	0.56
31	1.10	62.40	2.56	259.44	1.19	3.43	0.42
32	0.95	63.20	2.38	201.53	1.34	3.93	0.63
33	0.81	64.01	2.23	58.95	0.30	1.82	0.38
34	0.68	64.04	2.10	49.44	1.27	0.69	0.29
35	0.58	64.25	2.00	65.17	0.62	1.10	0.31
36	0.54	64.86	2.00	39.73	0.51	2.15	0.17
37	0.53	65.24	2.00	7.63	0.74	0.38	0.17
38	0.51	65.88	2.01	20.69	0.37	1.16	0.21
39	0.51	66.10	2.02	36.23	0.17	0.78	0.27
40	0.50	66.82	2.03	2.02	0.51	0.44	0.13
41	0.49	67.59	2.04	50.00	0.47	0.34	0.17
42	0.48	67.82	2.04	2.47	0.07	0.08	0.06
43	0.48	68.76	2.06	64.64	0.19	2.26	0.10
44	0.47	69.34	2.06	116.87	0.96	0.43	0.15
45	0.46	69.93	2.07	0.03	0.37	0.73	0.08
46	0.46	70.63	2.09	158.38	0.10	3.36	0.15
47	0.45	71.11	2.10	0.21	0.01	1.88	0.06
48	0.45	71.58	2.11	1.62	0.03	1.59	0.17
49	0.44	72.38	2.11	5.37	0.58	1.73	0.04
50	0.43	72.51	2.11	22.85	0.09	0.64	0.13

NO PCLTF

TABLE 5- 8C: ALLOCATED COSTS AND LEGALLY VALID CLAIMS AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

YEAR	MONITORING	RESPONSE	POST-CLOSURE CARE	PERSONAL-INJURY	REAL PROPERTY	ECONOMIC LOSS	NATURAL RESOURCE
51	0.42	72.99	2.12	104.59	0.04	0.63	0.10
52	0.41	72.92	2.12	26.77	0.02	0.0	0.06
53	0.41	73.40	2.13	18.81	0.01	0.06	0.06
54	0.41	73.78	2.14	0.71	0.02	0.03	0.02
55	0.40	73.95	2.14	0.0	0.00	0.31	0.02
56	0.40	74.54	2.15	0.28	0.0	0.01	0.02
57	0.39	75.01	2.16	47.32	0.10	0.33	0.06
58	0.39	75.46	2.17	42.12	0.13	0.34	0.08
59	0.38	75.79	2.17	0.0	0.00	0.31	0.02
60	0.38	76.13	2.17	91.77	0.04	1.91	0.06
61	0.37	76.31	2.18	134.92	0.01	0.01	0.06
62	0.37	76.93	2.18	1.28	0.06	0.04	0.04
63	0.37	77.05	2.19	0.0	0.04	0.36	0.0
64	0.37	77.09	2.20	0.0	0.0	0.0	0.0
65	0.36	77.49	2.20	0.0	0.48	0.31	0.02
66	0.36	77.79	2.20	8.77	0.00	0.31	0.02
67	0.36	78.28	2.21	6.26	0.01	0.07	0.06
68	0.35	78.29	2.22	0.0	0.01	0.01	0.0
69	0.35	78.44	2.22	0.0	0.02	1.56	0.02
70	0.34	78.41	2.22	0.13	0.09	0.01	0.04
71	0.34	78.62	2.22	0.0	0.00	0.0	0.02
72	0.34	78.82	2.23	12.66	0.03	0.64	0.02
73	0.34	79.27	2.24	4.05	0.14	1.63	0.02
74	0.34	79.45	2.24	16.65	1.93	0.63	0.02
75	0.34	79.57	2.24	50.94	0.01	0.35	0.04
76	0.33	80.15	2.25	31.46	0.03	0.31	0.08
77	0.33	80.21	2.24	0.0	0.00	0.0	0.02
78	0.33	80.33	2.25	1.90	0.01	0.18	0.04
79	0.33	80.33	2.25	0.0	0.03	0.63	0.02
80	0.32	80.51	2.25	0.0	0.01	0.33	0.02
81	0.32	80.59	2.25	0.0	0.01	0.0	0.0
82	0.32	80.73	2.24	0.0	0.01	1.57	0.04
83	0.32	80.96	2.24	0.0	0.0	0.0	0.0
84	0.32	81.11	2.25	0.0	0.14	0.0	0.02
85	0.32	81.34	2.25	0.0	0.00	0.63	0.0
86	0.32	81.42	2.25	0.0	0.00	0.07	0.02
87	0.32	81.52	2.25	116.64	0.04	0.0	0.06
88	0.32	81.87	2.26	0.0	0.00	0.05	0.02
89	0.31	81.93	2.26	0.0	0.01	0.66	0.0
90	0.31	82.01	2.26	6.80	0.10	0.13	0.02
91	0.31	82.20	2.26	0.19	0.02	0.02	0.02
92	0.31	82.30	2.26	0.17	0.01	0.0	0.02
93	0.30	82.40	2.26	2.25	0.01	0.05	0.04
94	0.30	82.40	2.26	0.0	0.0	0.0	0.0
95	0.31	82.43	2.26	0.0	0.0	0.0	0.0
96	0.30	82.56	2.27	2.47	0.27	0.09	0.02
97	0.30	82.56	2.27	0.0	0.0	0.0	0.0
98	0.30	82.90	2.27	0.0	0.0	0.05	0.0
99	0.30	82.86	2.27	0.0	0.00	0.01	0.0
100	0.30	83.08	2.28	9.22	0.01	0.0	0.02

NO PCLTF

TABLE 5- 9A: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	4.8	0.0	0.0	0.0	6.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0
3	6.0	0.0	0.0	0.0	34.6	0.0	0.1	0.9	0.1	0.0	0.0	0.0
4	5.1	0.0	0.0	0.1	49.6	0.0	0.4	3.8	0.3	0.0	0.0	0.0
5	4.7	0.0	0.0	0.1	63.9	0.0	0.9	7.9	0.5	0.0	0.0	0.0
6	4.2	0.0	0.0	0.1	77.0	0.0	1.2	10.5	0.7	0.0	0.0	0.0
7	2.7	0.0	0.0	0.1	65.1	0.0	1.4	12.5	0.8	0.0	0.0	0.0
8	2.6	0.0	0.0	0.1	56.9	0.0	1.3	11.5	0.8	0.0	0.0	0.0
9	2.5	0.0	0.0	0.1	50.9	0.0	1.0	8.6	0.7	0.0	0.0	0.0
10	2.5	0.0	0.0	0.0	43.8	0.0	0.6	5.5	0.6	0.0	0.0	0.0
11	2.4	0.0	0.0	0.0	36.6	0.0	0.4	3.2	0.6	0.0	0.0	0.0
12	2.3	0.0	0.0	0.0	35.9	0.0	0.2	2.1	0.5	0.0	0.0	0.0
13	2.2	0.0	0.0	0.0	36.7	0.0	0.2	1.6	0.5	0.0	0.0	0.0
14	2.2	0.0	0.0	0.0	35.6	0.0	0.2	1.5	0.5	0.0	0.0	0.0
15	2.1	0.0	0.0	0.0	34.6	0.0	0.2	1.6	0.5	0.0	0.0	0.0
16	2.1	0.0	0.0	0.0	33.3	0.0	0.2	1.4	0.5	0.0	0.0	0.0
17	2.0	0.0	0.0	0.0	33.1	0.0	0.2	1.4	0.4	0.0	0.0	0.0
18	1.9	0.0	0.0	0.0	31.8	0.0	0.1	1.3	0.4	0.0	0.0	0.0
19	1.9	0.0	0.0	0.0	32.0	0.0	0.1	1.3	0.4	0.0	0.0	0.0
20	1.9	0.0	0.0	0.0	30.5	0.0	0.1	1.2	0.4	0.0	0.0	0.0
21	1.8	0.0	0.0	0.0	29.5	0.0	0.1	1.3	0.4	0.0	0.0	0.0
22	1.8	0.0	0.0	0.0	28.7	0.0	0.1	0.9	0.4	0.0	0.0	0.0
23	1.7	0.0	0.0	0.0	27.6	0.0	0.1	0.6	0.3	0.0	0.0	0.0
24	1.7	0.0	0.0	0.0	27.0	0.0	0.1	0.6	0.3	0.0	0.0	0.0
25	1.6	0.0	0.0	0.0	26.2	0.0	0.1	0.7	0.3	0.0	0.0	0.0
26	1.6	0.0	0.0	0.0	25.5	0.0	0.1	0.5	0.3	0.0	0.0	0.0
27	1.6	0.0	0.0	0.0	24.5	0.0	0.1	0.5	0.3	0.0	0.0	0.0
28	1.5	0.0	0.0	0.0	24.0	0.0	0.1	0.6	0.3	0.0	0.0	0.0
29	1.5	0.0	0.0	0.0	23.5	0.0	0.1	0.5	0.3	0.0	0.0	0.0
30	1.4	0.0	0.0	0.0	23.2	0.0	0.1	0.6	0.3	0.0	0.0	0.0
31	1.4	0.0	0.0	0.0	22.7	0.0	0.1	0.9	0.3	0.0	0.0	0.0
32	1.4	0.0	0.0	0.0	21.8	0.0	0.1	0.5	0.3	0.0	0.0	0.0
33	1.3	0.0	0.0	0.0	21.3	0.0	0.0	0.3	0.3	0.0	0.0	0.0
34	1.3	0.0	0.0	0.0	20.7	0.0	0.0	0.4	0.3	0.0	0.0	0.0
35	1.3	0.0	0.0	0.0	20.2	0.0	0.0	0.3	0.2	0.0	0.0	0.0
36	1.3	0.0	0.0	0.0	19.7	0.0	0.0	0.2	0.2	0.0	0.0	0.0
37	1.2	0.0	0.0	0.0	19.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0
38	1.2	0.0	0.0	0.0	18.5	0.0	0.0	0.2	0.2	0.0	0.0	0.0
39	1.2	0.0	0.0	0.0	18.3	0.0	0.0	0.2	0.2	0.0	0.0	0.0
40	1.2	0.0	0.0	0.0	17.6	0.0	0.0	0.2	0.2	0.0	0.0	0.0
41	1.1	0.0	0.0	0.0	16.7	0.0	0.0	0.3	0.2	0.0	0.0	0.0
42	1.1	0.0	0.0	0.0	16.3	0.0	0.0	0.3	0.3	0.0	0.0	0.0
43	1.1	0.0	0.0	0.0	15.2	0.0	0.0	0.2	0.2	0.0	0.0	0.0
44	1.0	0.0	0.0	0.0	14.6	0.0	0.0	0.2	0.2	0.0	0.0	0.0
45	1.0	0.0	0.0	0.0	14.2	0.0	0.0	0.2	0.2	0.0	0.0	0.0
46	1.0	0.0	0.0	0.0	13.7	0.0	0.0	0.1	0.2	0.0	0.0	0.0
47	1.0	0.0	0.0	0.0	13.6	0.0	0.0	0.1	0.2	0.0	0.0	0.0
48	1.0	0.0	0.0	0.0	13.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0
49	0.9	0.0	0.0	0.0	12.9	0.0	0.0	0.1	0.2	0.0	0.0	0.0
50	0.9	0.0	0.0	0.0	12.5	0.0	0.0	0.2	0.2	0.0	0.0	0.0

NO PCLTF

TABLE 5- 9A: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.9	0.0	0.0	0.0	12.2	0.0	0.0	0.2	0.2	0.0	0.0	0.0
52	0.9	0.0	0.0	0.0	11.9	0.0	0.0	0.2	0.2	0.0	0.0	0.0
53	0.9	0.0	0.0	0.0	11.3	0.0	0.0	0.2	0.2	0.0	0.0	0.0
54	0.9	0.0	0.0	0.0	10.9	0.0	0.0	0.2	0.2	0.0	0.0	0.0
55	0.9	0.0	0.0	0.0	10.9	0.0	0.0	0.2	0.2	0.0	0.0	0.0
56	0.9	0.0	0.0	0.0	10.1	0.0	0.0	0.2	0.2	0.0	0.0	0.0
57	0.8	0.0	0.0	0.0	9.6	0.0	0.0	0.2	0.2	0.0	0.0	0.0
58	0.8	0.0	0.0	0.0	9.4	0.0	0.0	0.2	0.2	0.0	0.0	0.0
59	0.8	0.0	0.0	0.0	9.1	0.0	0.0	0.2	0.2	0.0	0.0	0.0
60	0.8	0.0	0.0	0.0	9.1	0.0	0.0	0.1	0.2	0.0	0.0	0.0
61	0.8	0.0	0.0	0.0	8.8	0.0	0.0	0.1	0.2	0.0	0.0	0.0
62	0.8	0.0	0.0	0.0	8.5	0.0	0.0	0.1	0.2	0.0	0.0	0.0
63	0.8	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0
64	0.8	0.0	0.0	0.0	8.4	0.0	0.0	0.1	0.2	0.0	0.0	0.0
65	0.8	0.0	0.0	0.0	8.2	0.0	0.0	0.1	0.2	0.0	0.0	0.0
66	0.8	0.0	0.0	0.0	8.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0
67	0.8	0.0	0.0	0.0	7.8	0.0	0.0	0.1	0.1	0.0	0.0	0.0
68	0.8	0.0	0.0	0.0	7.4	0.0	0.0	0.1	0.1	0.0	0.0	0.0
69	0.7	0.0	0.0	0.0	7.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0
70	0.7	0.0	0.0	0.0	7.1	0.0	0.0	0.2	0.1	0.0	0.0	0.0
71	0.7	0.0	0.0	0.0	6.8	0.0	0.0	0.2	0.2	0.0	0.0	0.0
72	0.7	0.0	0.0	0.0	6.6	0.0	0.0	0.2	0.1	0.0	0.0	0.0
73	0.7	0.0	0.0	0.0	6.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0
74	0.7	0.0	0.0	0.0	6.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
75	0.7	0.0	0.0	0.0	6.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
76	0.7	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
77	0.7	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0
78	0.7	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0
79	0.7	0.0	0.0	0.0	5.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
80	0.7	0.0	0.0	0.0	5.4	0.0	0.0	0.1	0.1	0.0	0.0	0.0
81	0.7	0.0	0.0	0.0	5.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0
82	0.7	0.0	0.0	0.0	5.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0
83	0.7	0.0	0.0	0.0	4.9	0.0	0.0	0.1	0.1	0.0	0.0	0.0
84	0.7	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0
85	0.6	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
86	0.6	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
87	0.6	0.0	0.0	0.0	4.4	0.0	0.0	0.1	0.1	0.0	0.0	0.0
88	0.6	0.0	0.0	0.0	4.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0
89	0.6	0.0	0.0	0.0	4.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
90	0.6	0.0	0.0	0.0	3.9	0.0	0.0	0.1	0.1	0.0	0.0	0.0
91	0.6	0.0	0.0	0.0	3.7	0.0	0.0	0.1	0.1	0.0	0.0	0.0
92	0.6	0.0	0.0	0.0	3.7	0.0	0.0	0.1	0.1	0.0	0.0	0.0
93	0.6	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
94	0.6	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0
95	0.6	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
96	0.6	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
97	0.6	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0
98	0.6	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
99	0.6	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0
100	0.6	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0

NO PCLTF

TABLE 5- 9B: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
10	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
11	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0
12	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0
13	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.0
14	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.4	0.0	0.0	0.0
15	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.5	0.0	0.0	0.0
16	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.5	0.0	0.0	0.0
17	0.4	0.0	0.0	0.0	0.7	0.0	0.0	0.1	0.6	0.0	0.0	0.0
18	0.4	0.0	0.0	0.0	0.5	0.0	0.0	0.2	0.6	0.0	0.0	0.0
19	0.4	0.0	0.0	0.0	1.0	0.0	0.0	0.2	0.7	0.0	0.0	0.0
20	0.5	0.0	0.0	0.0	0.8	0.0	0.0	0.3	0.7	0.0	0.0	0.0
21	0.5	0.0	0.0	0.0	0.8	0.0	0.0	0.3	0.8	0.0	0.0	0.0
22	0.5	0.0	0.0	0.0	1.0	0.0	0.0	0.3	0.8	0.0	0.0	0.0
23	0.5	0.0	0.0	0.0	0.8	0.0	0.0	0.3	0.8	0.0	0.0	0.0
24	0.5	0.0	0.0	0.0	1.2	0.0	0.0	0.2	0.9	0.0	0.0	0.0
25	0.6	0.0	0.0	0.0	0.8	0.0	0.0	0.3	0.9	0.0	0.0	0.0
26	0.6	0.0	0.0	0.0	0.9	0.0	0.0	0.3	0.9	0.0	0.0	0.0
27	0.6	0.0	0.0	0.0	0.9	0.0	0.0	0.3	0.9	0.0	0.0	0.0
28	0.6	0.0	0.0	0.0	1.0	0.0	0.0	0.3	1.0	0.0	0.0	0.0
29	0.6	0.0	0.0	0.0	0.9	0.0	0.0	0.3	1.0	0.0	0.0	0.0
30	0.7	0.0	0.0	0.0	1.4	0.0	0.0	0.3	1.0	0.0	0.0	0.0
31	0.7	0.0	0.0	0.0	1.1	0.0	0.0	0.3	1.0	0.0	0.0	0.0
32	0.7	0.0	0.0	0.0	1.2	0.0	0.0	0.3	1.0	0.0	0.0	0.0
33	0.6	0.0	0.0	0.0	1.6	0.0	0.1	0.5	1.0	0.0	0.0	0.0
34	0.6	0.0	0.0	0.0	1.3	0.0	0.1	0.5	1.0	0.0	0.0	0.0
35	0.6	0.0	0.0	0.0	1.5	0.0	0.1	0.5	0.9	0.0	0.1	0.0
36	0.6	0.0	0.0	0.0	1.4	0.0	0.1	0.7	0.9	0.0	0.1	0.0
37	0.6	0.0	0.1	0.0	1.5	0.0	0.1	0.7	0.9	0.0	0.1	0.0
38	0.6	0.0	0.1	0.0	1.7	0.0	0.1	0.5	0.9	0.0	0.1	0.0
39	0.5	0.0	0.1	0.0	1.6	0.0	0.1	0.6	0.8	0.0	0.1	0.0
40	0.5	0.0	0.1	0.0	1.6	0.0	0.1	0.6	0.8	0.0	0.1	0.0
41	0.5	0.0	0.1	0.0	2.0	0.0	0.1	0.7	0.8	0.0	0.1	0.0
42	0.5	0.0	0.1	0.0	1.9	0.0	0.1	0.7	0.8	0.0	0.1	0.0
43	0.5	0.0	0.1	0.0	1.7	0.0	0.1	1.0	0.8	0.0	0.1	0.0
44	0.5	0.0	0.1	0.0	1.7	0.0	0.1	1.0	0.7	0.0	0.1	0.0
45	0.4	0.0	0.1	0.0	1.7	0.0	0.2	1.1	0.7	0.0	0.2	0.0
46	0.4	0.0	0.1	0.0	1.6	0.0	0.2	1.2	0.7	0.0	0.2	0.0
47	0.4	0.0	0.1	0.0	1.6	0.0	0.1	1.2	0.7	0.0	0.2	0.0
48	0.4	0.0	0.1	0.0	1.6	0.0	0.2	1.4	0.7	0.0	0.2	0.0
49	0.4	0.0	0.1	0.0	1.6	0.0	0.2	1.4	0.7	0.0	0.2	0.0
50	0.4	0.0	0.1	0.0	1.7	0.0	0.2	1.4	0.7	0.0	0.2	0.0

NO PCLTF

TABLE 5- 9B: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.4	0.0	0.1	0.0	1.6	0.0	0.2	1.5	0.7	0.0	0.2	0.0
52	0.4	0.0	0.1	0.0	1.9	0.0	0.2	1.5	0.7	0.0	0.2	0.0
53	0.4	0.0	0.1	0.0	1.9	0.0	0.2	1.4	0.7	0.0	0.2	0.0
54	0.4	0.0	0.1	0.0	1.9	0.0	0.2	1.4	0.7	0.0	0.2	0.0
55	0.4	0.0	0.1	0.0	2.1	0.0	0.2	1.4	0.7	0.0	0.2	0.0
56	0.4	0.0	0.1	0.0	2.0	0.0	0.2	1.6	0.7	0.0	0.2	0.0
57	0.4	0.0	0.1	0.0	2.0	0.0	0.2	1.6	0.7	0.0	0.2	0.0
58	0.4	0.0	0.1	0.0	2.0	0.0	0.2	1.6	0.7	0.0	0.2	0.0
59	0.4	0.0	0.2	0.0	2.3	0.0	0.2	1.6	0.7	0.0	0.2	0.0
60	0.4	0.0	0.2	0.0	1.9	0.0	0.2	1.5	0.7	0.0	0.3	0.0
61	0.4	0.0	0.2	0.0	2.0	0.0	0.2	1.4	0.7	0.0	0.3	0.0
62	0.4	0.0	0.2	0.0	2.0	0.0	0.2	1.7	0.7	0.0	0.3	0.0
63	0.4	0.0	0.2	0.0	2.0	0.0	0.2	2.0	0.7	0.0	0.3	0.0
64	0.4	0.0	0.2	0.0	1.9	0.0	0.3	2.4	0.7	0.0	0.3	0.0
65	0.3	0.0	0.2	0.0	2.0	0.0	0.3	2.4	0.7	0.0	0.3	0.0
66	0.3	0.0	0.2	0.0	2.0	0.0	0.3	2.4	0.7	0.0	0.3	0.0
67	0.3	0.0	0.2	0.0	1.9	0.0	0.3	2.4	0.7	0.0	0.3	0.0
68	0.3	0.0	0.2	0.0	2.0	0.0	0.3	2.3	0.7	0.0	0.3	0.0
69	0.3	0.0	0.2	0.0	2.0	0.0	0.3	2.2	0.7	0.0	0.3	0.0
70	0.3	0.0	0.2	0.0	2.0	0.0	0.3	2.3	0.7	0.0	0.3	0.0
71	0.3	0.0	0.2	0.0	2.0	0.0	0.3	2.2	0.7	0.0	0.3	0.0
72	0.3	0.0	0.2	0.0	1.9	0.0	0.3	2.4	0.7	0.0	0.3	0.0
73	0.3	0.0	0.2	0.0	1.9	0.0	0.3	2.3	0.7	0.0	0.3	0.0
74	0.3	0.0	0.2	0.0	2.0	0.0	0.3	2.4	0.7	0.0	0.4	0.0
75	0.3	0.0	0.2	0.0	2.0	0.0	0.3	2.3	0.6	0.0	0.4	0.0
76	0.3	0.0	0.2	0.0	2.0	0.0	0.3	2.3	0.6	0.0	0.4	0.0
77	0.3	0.0	0.2	0.0	2.1	0.0	0.3	2.3	0.6	0.0	0.4	0.0
78	0.3	0.0	0.2	0.0	2.1	0.0	0.3	2.3	0.6	0.0	0.4	0.0
79	0.3	0.0	0.2	0.0	2.0	0.0	0.3	2.5	0.6	0.0	0.4	0.0
80	0.3	0.0	0.2	0.0	2.0	0.0	0.3	2.6	0.6	0.0	0.4	0.0
81	0.3	0.0	0.2	0.0	2.0	0.0	0.3	2.6	0.6	0.0	0.4	0.0
82	0.3	0.0	0.2	0.0	2.0	0.0	0.3	2.6	0.6	0.0	0.4	0.0
83	0.3	0.0	0.2	0.0	2.0	0.0	0.3	2.6	0.6	0.0	0.4	0.0
84	0.3	0.0	0.2	0.0	1.8	0.0	0.3	2.7	0.6	0.0	0.4	0.0
85	0.3	0.0	0.2	0.0	1.8	0.0	0.3	2.7	0.6	0.0	0.4	0.0
86	0.3	0.0	0.2	0.0	1.8	0.0	0.3	2.7	0.6	0.0	0.4	0.0
87	0.3	0.0	0.2	0.0	1.8	0.0	0.3	2.7	0.6	0.0	0.4	0.0
88	0.2	0.0	0.2	0.0	1.8	0.0	0.3	2.8	0.5	0.0	0.5	0.0
89	0.2	0.0	0.3	0.0	1.8	0.0	0.3	2.8	0.5	0.0	0.5	0.0
90	0.2	0.0	0.3	0.0	1.8	0.0	0.3	2.8	0.5	0.0	0.5	0.0
91	0.2	0.0	0.3	0.0	1.8	0.0	0.4	3.1	0.5	0.0	0.5	0.0
92	0.2	0.0	0.3	0.0	1.8	0.0	0.4	3.0	0.5	0.0	0.5	0.0
93	0.2	0.0	0.3	0.0	1.8	0.0	0.4	3.0	0.5	0.0	0.5	0.0
94	0.2	0.0	0.3	0.0	1.8	0.0	0.4	3.0	0.5	0.0	0.5	0.0
95	0.2	0.0	0.3	0.0	1.8	0.0	0.4	3.0	0.5	0.0	0.5	0.0
96	0.2	0.0	0.3	0.0	1.8	0.0	0.3	2.9	0.5	0.0	0.5	0.0
97	0.2	0.0	0.3	0.0	1.8	0.0	0.4	3.0	0.5	0.0	0.5	0.0
98	0.2	0.0	0.3	0.0	1.8	0.0	0.4	3.1	0.5	0.0	0.5	0.0
99	0.2	0.0	0.3	0.0	1.8	0.0	0.4	3.2	0.5	0.0	0.5	0.0
100	0.2	0.0	0.3	0.0	1.8	0.0	0.4	3.2	0.5	0.0	0.5	0.0

NO PCLTF

TABLE 5- 9C: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	0.4	0.0	0.0	0.1	3.5	0.0	0.2	1.5	0.3	0.0	0.0	0.0
2	0.9	0.0	0.0	0.1	8.0	0.0	0.2	2.1	0.8	0.0	0.0	0.0
3	1.5	0.0	0.0	0.1	17.8	0.0	0.5	4.4	1.2	0.0	0.0	0.0
4	1.5	0.0	0.0	0.1	24.1	0.0	0.7	6.1	1.6	0.0	0.0	0.0
5	1.5	0.0	0.0	0.1	27.8	0.0	0.8	7.2	1.9	0.0	0.0	0.0
6	1.4	0.0	0.0	0.1	33.0	0.0	0.9	8.2	1.8	0.0	0.0	0.0
7	0.9	0.0	0.0	0.0	26.5	0.0	1.0	8.6	1.8	0.0	0.0	0.0
8	0.9	0.0	0.0	0.0	22.8	0.0	0.9	8.4	1.8	0.0	0.0	0.0
9	0.9	0.0	0.0	0.1	20.5	0.0	1.1	9.6	1.8	0.0	0.1	0.0
10	0.9	0.0	0.0	0.1	19.4	0.0	1.2	10.5	1.9	0.0	0.1	0.0
11	0.9	0.0	0.0	0.1	18.7	0.0	1.3	11.8	2.0	0.0	0.1	0.0
12	0.9	0.0	0.1	0.1	19.0	0.0	1.5	13.4	2.0	0.0	0.1	0.0
13	0.9	0.0	0.1	0.1	19.9	0.0	1.6	14.2	2.0	0.0	0.1	0.0
14	0.9	0.0	0.1	0.1	21.5	0.0	1.7	14.9	2.1	0.0	0.1	0.0
15	0.9	0.0	0.1	0.1	22.5	0.0	1.8	15.8	2.1	0.0	0.2	0.0
16	0.9	0.0	0.1	0.1	22.8	0.0	1.8	16.5	2.1	0.0	0.2	0.0
17	0.9	0.0	0.1	0.1	23.9	0.0	1.9	17.0	2.2	0.0	0.2	0.0
18	0.9	0.0	0.1	0.1	25.3	0.0	1.9	17.1	2.2	0.0	0.2	0.0
19	0.9	0.0	0.1	0.1	26.3	0.0	2.0	17.7	2.2	0.0	0.2	0.0
20	0.9	0.0	0.1	0.1	27.5	0.0	2.0	18.0	2.3	0.0	0.2	0.0
21	0.9	0.0	0.1	0.1	28.3	0.0	2.1	18.8	2.3	0.0	0.2	0.0
22	0.9	0.0	0.1	0.1	29.8	0.0	2.2	19.5	2.3	0.0	0.2	0.0
23	0.9	0.0	0.1	0.1	30.9	0.0	2.2	19.9	2.3	0.0	0.2	0.0
24	0.9	0.0	0.1	0.1	30.9	0.0	2.2	20.2	2.3	0.0	0.2	0.0
25	0.9	0.0	0.1	0.1	32.0	0.0	2.3	20.7	2.4	0.0	0.2	0.0
26	0.9	0.0	0.1	0.1	33.2	0.0	2.3	20.9	2.4	0.0	0.2	0.0
27	0.9	0.0	0.1	0.1	34.3	0.0	2.3	21.0	2.4	0.0	0.2	0.0
28	0.9	0.0	0.1	0.1	35.0	0.0	2.4	21.2	2.4	0.0	0.2	0.0
29	0.9	0.0	0.1	0.1	36.5	0.0	2.4	21.9	2.4	0.0	0.2	0.0
30	0.9	0.0	0.1	0.1	37.1	0.0	2.4	22.0	2.4	0.0	0.3	0.0
31	0.9	0.0	0.1	0.1	37.5	0.0	2.5	22.4	2.3	0.0	0.3	0.0
32	0.7	0.0	0.1	0.1	38.0	0.0	2.5	22.7	2.0	0.0	0.4	0.0
33	0.5	0.0	0.2	0.1	38.2	0.0	2.6	23.2	1.8	0.0	0.4	0.0
34	0.4	0.0	0.2	0.1	38.1	0.0	2.6	23.3	1.6	0.0	0.5	0.0
35	0.3	0.0	0.2	0.1	38.3	0.0	2.6	23.4	1.5	0.0	0.5	0.0
36	0.3	0.0	0.2	0.1	38.6	0.0	2.6	23.6	1.5	0.0	0.5	0.0
37	0.3	0.0	0.2	0.1	38.8	0.0	2.6	23.8	1.5	0.0	0.5	0.0
38	0.2	0.0	0.2	0.1	39.2	0.0	2.7	24.0	1.5	0.0	0.5	0.0
39	0.2	0.0	0.2	0.1	39.4	0.0	2.7	24.0	1.5	0.0	0.5	0.0
40	0.2	0.0	0.2	0.1	40.1	0.0	2.7	24.1	1.5	0.0	0.5	0.0
41	0.2	0.0	0.2	0.1	40.7	0.0	2.7	24.2	1.5	0.0	0.5	0.0
42	0.2	0.0	0.2	0.1	40.8	0.0	2.7	24.3	1.5	0.0	0.5	0.0
43	0.2	0.0	0.2	0.1	41.6	0.0	2.7	24.4	1.5	0.0	0.6	0.0
44	0.2	0.0	0.2	0.1	42.0	0.0	2.7	24.6	1.5	0.0	0.6	0.0
45	0.2	0.0	0.2	0.1	42.2	0.0	2.8	25.0	1.5	0.0	0.6	0.0
46	0.2	0.0	0.2	0.0	42.3	0.0	2.8	25.5	1.5	0.0	0.6	0.0
47	0.2	0.0	0.2	0.1	42.6	0.0	2.9	25.7	1.5	0.0	0.6	0.0
48	0.2	0.0	0.2	0.1	43.0	0.0	2.9	25.7	1.5	0.0	0.6	0.0
49	0.2	0.0	0.2	0.0	43.2	0.0	2.9	26.3	1.5	0.0	0.6	0.0
50	0.2	0.0	0.2	0.0	43.3	0.0	2.9	26.3	1.5	0.0	0.6	0.0

NO PCLTF

TABLE 5- 9C: ALLOCATION OF MONITORING, RESPONSE, AND POST-CLOSURE CARE COSTS AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	MONITORING				RESPONSE				POST-CLOSURE CARE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.2	0.0	0.2	0.0	43.5	0.0	3.0	26.5	1.5	0.0	0.6	0.0
52	0.2	0.0	0.2	0.0	43.6	0.0	2.9	26.4	1.5	0.0	0.6	0.0
53	0.2	0.0	0.2	0.0	43.9	0.0	3.0	26.6	1.5	0.0	0.6	0.0
54	0.2	0.0	0.2	0.0	44.2	0.0	3.0	26.6	1.5	0.0	0.6	0.0
55	0.2	0.0	0.2	0.0	44.2	0.0	3.0	26.7	1.5	0.0	0.6	0.0
56	0.2	0.0	0.2	0.0	44.8	0.0	3.0	26.8	1.6	0.0	0.6	0.0
57	0.2	0.0	0.2	0.0	45.1	0.0	3.0	27.0	1.6	0.0	0.6	0.0
58	0.2	0.0	0.2	0.0	45.1	0.0	3.0	27.3	1.6	0.0	0.6	0.0
59	0.1	0.0	0.2	0.0	45.2	0.0	3.1	27.5	1.6	0.0	0.6	0.0
60	0.1	0.0	0.2	0.0	45.3	0.0	3.1	27.7	1.6	0.0	0.6	0.0
61	0.1	0.0	0.2	0.0	45.3	0.0	3.1	27.9	1.6	0.0	0.6	0.0
62	0.1	0.0	0.2	0.0	45.5	0.0	3.1	28.3	1.6	0.0	0.6	0.0
63	0.1	0.0	0.2	0.0	45.5	0.0	3.2	28.4	1.6	0.0	0.6	0.0
64	0.1	0.0	0.2	0.0	45.6	0.0	3.2	28.3	1.6	0.0	0.6	0.0
65	0.1	0.0	0.2	0.0	45.6	0.0	3.2	28.7	1.6	0.0	0.6	0.0
66	0.1	0.0	0.2	0.0	45.6	0.0	3.2	29.0	1.6	0.0	0.6	0.0
67	0.1	0.0	0.2	0.0	45.8	0.0	3.3	29.2	1.6	0.0	0.6	0.0
68	0.1	0.0	0.2	0.0	46.1	0.0	3.2	29.0	1.6	0.0	0.6	0.0
69	0.1	0.0	0.2	0.0	46.1	0.0	3.2	29.1	1.6	0.0	0.6	0.0
70	0.1	0.0	0.2	0.0	46.1	0.0	3.2	29.1	1.6	0.0	0.6	0.0
71	0.1	0.0	0.2	0.0	46.2	0.0	3.2	29.1	1.6	0.0	0.6	0.0
72	0.1	0.0	0.2	0.0	46.3	0.0	3.3	29.2	1.6	0.0	0.6	0.0
73	0.1	0.0	0.2	0.0	46.4	0.0	3.4	29.5	1.6	0.0	0.6	0.0
74	0.1	0.0	0.2	0.0	46.5	0.0	3.4	29.6	1.6	0.0	0.6	0.0
75	0.1	0.0	0.2	0.0	46.5	0.0	3.4	29.6	1.6	0.0	0.6	0.0
76	0.1	0.0	0.2	0.0	46.6	0.0	3.4	30.1	1.6	0.0	0.6	0.0
77	0.1	0.0	0.2	0.0	46.5	0.0	3.5	30.3	1.6	0.0	0.6	0.0
78	0.1	0.0	0.2	0.0	46.5	0.0	3.4	30.4	1.6	0.0	0.7	0.0
79	0.1	0.0	0.2	0.0	46.5	0.0	3.4	30.4	1.6	0.0	0.7	0.0
80	0.1	0.0	0.2	0.0	46.4	0.0	3.5	30.6	1.6	0.0	0.7	0.0
81	0.1	0.0	0.2	0.0	46.5	0.0	3.5	30.6	1.6	0.0	0.7	0.0
82	0.1	0.0	0.2	0.0	46.1	0.0	3.5	31.1	1.6	0.0	0.7	0.0
83	0.1	0.0	0.2	0.0	46.2	0.0	3.5	31.2	1.6	0.0	0.7	0.0
84	0.1	0.0	0.2	0.0	46.1	0.0	3.6	31.4	1.6	0.0	0.7	0.0
85	0.1	0.0	0.2	0.0	46.1	0.0	3.6	31.7	1.6	0.0	0.7	0.0
86	0.1	0.0	0.2	0.0	46.1	0.0	3.6	31.7	1.6	0.0	0.7	0.0
87	0.1	0.0	0.2	0.0	46.0	0.0	3.6	31.9	1.6	0.0	0.7	0.0
88	0.1	0.0	0.2	0.0	45.9	0.0	3.7	32.3	1.6	0.0	0.7	0.0
89	0.1	0.0	0.2	0.0	45.9	0.0	3.7	32.3	1.6	0.0	0.7	0.0
90	0.1	0.0	0.2	0.0	45.9	0.0	3.7	32.4	1.6	0.0	0.7	0.0
91	0.1	0.0	0.2	0.0	46.0	0.0	3.7	32.5	1.6	0.0	0.7	0.0
92	0.1	0.0	0.2	0.0	45.9	0.0	3.7	32.7	1.6	0.0	0.7	0.0
93	0.1	0.0	0.2	0.0	45.9	0.0	3.7	32.8	1.6	0.0	0.7	0.0
94	0.1	0.0	0.2	0.0	45.7	0.0	3.7	33.0	1.6	0.0	0.7	0.0
95	0.1	0.0	0.2	0.0	45.7	0.0	3.7	33.0	1.6	0.0	0.7	0.0
96	0.1	0.0	0.2	0.0	45.7	0.0	3.7	33.1	1.6	0.0	0.7	0.0
97	0.1	0.0	0.2	0.0	45.6	0.0	3.8	33.2	1.6	0.0	0.7	0.0
98	0.1	0.0	0.2	0.0	45.5	0.0	3.8	33.6	1.6	0.0	0.7	0.0
99	0.1	0.0	0.2	0.0	45.3	0.0	3.8	33.8	1.6	0.0	0.7	0.0
100	0.1	0.0	0.2	0.0	45.4	0.0	3.8	33.8	1.6	0.0	0.7	0.0

NO PCLTF

TABLE 5-10A: ALLOCATION OF CLAIMS COSTS BY TYPE AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	113.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.5	0.0	0.0	0.0
3	948.2	0.0	0.0	0.0	10.8	0.0	0.0	0.0	17.7	0.0	0.0	0.0	3.5	0.0	0.0	0.1
4	709.0	0.0	0.0	0.0	10.6	0.0	0.0	0.0	23.9	0.0	0.0	0.0	6.0	0.0	0.0	0.4
5	1200.6	0.0	0.0	0.0	11.8	0.0	0.0	0.0	26.7	0.0	0.0	0.0	5.9	0.0	0.0	0.3
6	910.2	0.0	0.0	0.0	6.0	0.0	0.0	0.0	23.1	0.0	0.0	0.0	5.8	0.0	0.0	0.2
7	236.4	0.0	0.0	0.0	8.4	0.0	0.4	0.0	9.7	0.0	0.0	0.0	3.7	0.0	0.0	0.3
8	108.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.9	0.0	0.0	0.1
9	121.4	0.0	0.0	0.0	3.1	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.8	0.0	0.0	0.0
10	184.1	0.0	0.0	0.0	1.8	0.0	0.0	0.0	4.2	0.0	0.0	0.0	1.0	0.0	0.0	0.1
11	65.7	0.0	0.0	0.0	1.7	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.6	0.0	0.0	0.0
12	253.8	0.0	0.0	0.0	2.3	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.9	0.0	0.0	0.0
13	141.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.7	0.0	0.0	0.0
14	175.5	0.0	0.0	0.0	4.6	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.8	0.0	0.0	0.0
15	145.8	0.0	0.0	0.0	1.3	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.5	0.0	0.0	0.0
16	140.7	0.0	0.0	0.0	1.8	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.8	0.0	0.0	0.0
17	67.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0
18	208.6	0.0	0.0	0.0	1.3	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.7	0.0	0.0	0.1
19	82.7	0.0	0.0	0.0	1.3	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0
20	165.7	0.0	0.0	0.0	1.2	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
21	147.6	0.0	0.0	0.0	1.5	0.0	0.0	0.0	4.7	0.0	0.0	0.0	0.5	0.0	0.0	0.0
22	95.4	0.0	0.0	0.0	0.5	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.4	0.0	0.0	0.0
23	31.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0
24	121.9	0.0	0.0	0.0	1.3	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.5	0.0	0.0	0.0
25	129.2	0.0	0.0	0.0	0.7	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.3	0.0	0.0	0.1
26	18.8	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.2	0.0	0.0	0.0
27	30.4	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.3	0.0	0.0	0.0
28	66.4	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0
29	58.6	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.3	0.0	0.0	0.0
30	76.4	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.2	0.0	0.0	0.0
31	228.5	0.0	0.0	0.0	1.2	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.3	0.0	0.0	0.0
32	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0
33	76.1	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3	0.0	0.0	0.0
34	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
35	19.1	0.0	0.0	0.0	0.5	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0
36	95.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	17.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.3	0.0	0.0	0.0
39	79.5	0.0	0.0	0.0	2.6	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
41	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	101.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	28.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
45	33.6	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	19.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NO PCLTF

TABLE 5-10A: ALLOCATION OF CLAIMS COSTS BY TYPE AT FACILITIES WITH QUALIFICATION STATUS PENDING
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	16.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	32.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	60.4	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	5.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
74	40.7	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	62.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NO PCLTF

TABLE 5-10B: ALLOCATION OF CLAIMS COSTS BY TYPE AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	20.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	20.3	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	27.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
33	0.6	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
34	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	5.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
41	0.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
45	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	36.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	13.6	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NO PCLTF

TABLE 5-10B: ALLOCATION OF CLAIMS COSTS BY TYPE AT QUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	18.4	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
52	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
53	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	0.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	85.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	6.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
64	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
65	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	2.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
67	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74	10.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
75	36.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	5.7	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	25.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	60.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	7.3	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	85.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	22.2	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NO PCLTF

TABLE 5-10C: ALLOCATION OF CLAIMS COSTS BY TYPE AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
1	54.4	0.0	0.0	0.0	1.6	0.0	0.0	0.0	2.0	0.0	0.3	0.0	0.7	0.0	0.0	0.2
2	88.7	0.0	34.0	0.0	1.0	0.0	0.0	0.0	3.1	0.0	0.4	0.0	0.5	0.0	0.0	0.1
3	261.4	0.0	0.0	0.0	6.3	0.0	0.0	0.0	9.8	0.0	0.0	0.0	1.9	0.0	0.0	0.4
4	356.3	0.0	0.0	0.0	10.8	0.0	0.0	0.0	10.2	0.0	0.0	0.0	2.2	0.0	0.0	0.3
5	425.8	0.0	0.0	0.0	1.9	0.0	0.0	0.0	11.0	0.0	0.0	0.0	1.9	0.0	0.0	0.1
6	478.3	0.0	0.0	0.0	6.2	0.0	0.0	0.0	8.7	0.0	0.0	0.0	1.4	0.0	0.0	0.2
7	51.1	0.0	0.0	0.0	1.2	0.0	0.1	0.0	5.7	0.0	0.3	0.0	1.4	0.0	0.0	0.1
8	1.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0	0.0
9	171.4	0.0	0.0	0.0	0.5	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1
10	243.7	0.0	0.0	0.0	4.4	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.4	0.0	0.0	0.0
11	259.5	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.6	0.0	0.0	0.3
12	57.5	0.0	0.0	0.0	0.7	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.3	0.0	0.0	0.2
13	40.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.4	0.0	0.0	0.3
14	27.8	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.4	0.0	0.0	0.1
15	154.4	0.0	0.0	0.0	0.7	0.0	0.0	0.0	4.4	0.0	0.1	0.0	0.4	0.0	0.0	0.2
16	72.9	0.0	0.0	0.0	4.8	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.4	0.0	0.0	0.2
17	203.3	0.0	0.0	0.0	1.1	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.4	0.0	0.0	0.2
18	75.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.5	0.0	0.0	0.3
19	172.4	0.0	0.0	0.0	1.3	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.4	0.0	0.0	0.2
20	167.9	0.0	0.0	0.0	0.9	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.5	0.0	0.0	0.2
21	92.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.3	0.0	0.0	0.2
22	67.8	0.0	0.0	0.0	2.2	0.0	0.0	0.0	1.4	0.0	0.3	0.0	0.5	0.0	0.0	0.3
23	25.2	0.0	0.0	0.0	2.9	0.0	0.1	0.0	2.8	0.0	0.0	0.0	0.4	0.0	0.0	0.3
24	72.7	0.0	0.0	0.0	0.2	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.3	0.0	0.0	0.2
25	80.1	0.0	0.0	0.0	1.5	0.0	0.2	0.0	3.6	0.0	0.0	0.0	0.5	0.0	0.0	0.3
26	26.5	0.0	0.0	0.0	1.7	0.0	0.1	0.0	1.5	0.0	0.3	0.0	0.4	0.0	0.0	0.2
27	165.7	0.0	0.0	0.0	0.5	0.0	0.0	0.0	5.4	0.0	0.3	0.0	0.3	0.0	0.0	0.2
28	90.6	0.0	0.0	0.0	3.4	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.4	0.0	0.0	0.2
29	53.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.4	0.0	0.0	0.3
30	468.7	0.0	0.0	0.0	4.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.4	0.0	0.0	0.2
31	198.0	0.0	0.0	0.0	0.2	0.0	0.3	0.0	2.0	0.0	0.0	0.0	0.3	0.0	0.0	0.2
32	44.1	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.4	0.0	0.0	0.2
33	26.9	0.0	0.0	0.0	0.2	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.2	0.0	0.0	0.2
34	18.2	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0	0.1
35	38.6	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.0	0.2
36	7.4	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0
37	7.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.1
38	17.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.0	0.1
39	34.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.2	0.0	0.0	0.1
40	0.4	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.1
41	0.7	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
42	2.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
43	34.8	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
44	42.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.1
45	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
46	84.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1
47	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.1	0.0	0.0	0.1
49	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1

NO PCLTF

TABLE 5-10C: ALLOCATION OF CLAIMS COSTS BY TYPE AT UNQUALIFIED FACILITIES
MILLIONS OF 1982 DOLLARS; YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	PERSONAL INJURY				REAL PROPERTY				ECONOMIC LOSS				NATURAL RESOURCE DAMAGE			
YEAR	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF	OWNER	PCLTF	STATE	SF
51	30.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.1
52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
53	18.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1
58	41.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	83.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	134.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	4.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74	16.7	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	49.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	15.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87	31.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	6.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	2.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NO PCLTF

TABLE 5-11: SUMMARY OF FACILITY/FIRM BANKRUPTCY STATUS BY YEAR AND BY NET WORTH FOR NON-GOVERNMENT OWNED FACILITIES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	FIRM NET WORTH IN 1982 DOLLARS											
	LESS THAN 10 MILLION			10 TO 100 MILLION			100 TO 1000 MILLION			GREATER THAN 1000 MILLION		
	SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES	
YEAR	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)
1	243.9	11.69	(4.80)	109.8	0.10	(0.09)	223.8	0.48	(0.22)	341.2	0.59	(0.17)
2	232.2	2.90	(1.23)	109.7	0.28	(0.25)	223.3	0.45	(0.20)	340.6	0.79	(0.23)
3	229.3	9.59	(4.17)	109.4	0.48	(0.44)	222.8	0.62	(0.28)	339.8	0.69	(0.21)
4	219.7	27.52	(12.52)	109.0	1.31	(1.20)	222.2	0.69	(0.31)	339.1	0.52	(0.16)
5	192.2	23.62	(12.31)	107.7	1.14	(1.08)	221.5	0.62	(0.28)	338.6	1.21	(0.35)
6	168.6	19.52	(11.56)	106.5	1.59	(1.48)	221.0	1.72	(0.76)	337.4	1.24	(0.37)
7	149.2	17.31	(11.64)	105.4	1.31	(1.29)	220.4	1.24	(0.57)	337.2	1.24	(0.37)
8	132.5	9.03	(6.90)	104.9	0.93	(0.87)	220.6	0.69	(0.32)	338.7	0.97	(0.28)
9	124.1	7.52	(6.03)	105.5	0.79	(0.76)	222.4	0.76	(0.34)	341.0	1.24	(0.36)
10	117.0	5.31	(4.57)	105.9	0.62	(0.60)	223.7	0.38	(0.17)	343.6	0.69	(0.20)
11	112.2	5.83	(5.24)	106.2	0.93	(0.88)	225.2	0.72	(0.31)	346.3	1.07	(0.31)
12	106.7	5.24	(4.98)	105.9	0.76	(0.74)	226.6	0.79	(0.36)	347.8	1.97	(0.57)
13	101.9	3.86	(3.80)	106.2	0.59	(0.54)	227.9	0.52	(0.23)	348.7	0.55	(0.16)
14	98.6	3.48	(3.56)	106.7	0.66	(0.62)	229.3	0.59	(0.26)	351.4	1.38	(0.38)
15	95.5	4.03	(4.27)	106.7	0.79	(0.75)	230.6	1.07	(0.47)	352.8	1.28	(0.36)
16	91.8	3.52	(3.82)	106.4	0.62	(0.58)	230.6	0.69	(0.30)	353.8	1.00	(0.28)
17	88.6	2.79	(3.18)	106.7	0.83	(0.78)	232.0	0.48	(0.22)	355.2	0.62	(0.18)
18	86.1	2.90	(3.37)	106.4	0.76	(0.71)	232.9	0.59	(0.25)	356.5	0.79	(0.22)
19	83.6	2.28	(2.65)	106.2	1.03	(0.98)	233.5	0.45	(0.19)	357.3	0.72	(0.21)
20	81.7	2.48	(3.01)	105.6	1.07	(1.03)	234.5	0.62	(0.26)	358.7	0.62	(0.17)
21	79.4	2.17	(2.79)	104.8	0.66	(0.63)	234.8	0.79	(0.34)	359.6	1.72	(0.49)
22	77.4	2.17	(2.82)	104.7	0.83	(0.81)	235.1	0.66	(0.29)	359.4	0.41	(0.11)
23	75.4	1.76	(2.36)	104.3	0.55	(0.54)	235.3	0.66	(0.28)	360.8	0.90	(0.26)
24	73.8	2.10	(2.94)	104.0	0.93	(0.88)	235.4	0.69	(0.29)	360.8	0.79	(0.22)
25	71.8	1.59	(2.25)	103.4	0.72	(0.69)	235.7	0.62	(0.27)	360.6	1.41	(0.38)
26	70.2	1.59	(2.30)	103.0	0.62	(0.60)	235.7	0.69	(0.29)	360.3	1.03	(0.30)
27	68.8	1.62	(2.36)	102.7	0.69	(0.67)	235.7	0.28	(0.12)	360.2	1.69	(0.47)
28	67.2	1.31	(1.94)	102.2	0.55	(0.55)	236.0	0.59	(0.25)	359.3	1.17	(0.34)
29	66.1	1.24	(1.90)	102.0	0.52	(0.52)	236.1	0.48	(0.20)	359.0	0.24	(0.07)
30	64.9	1.45	(2.23)	101.8	0.45	(0.44)	236.2	0.52	(0.22)	359.7	1.14	(0.32)
31	63.5	1.34	(2.15)	101.4	0.93	(0.94)	236.1	0.38	(0.16)	359.0	0.52	(0.15)
32	62.3	1.21	(1.97)	100.8	0.41	(0.40)	236.3	1.17	(0.49)	359.2	1.10	(0.31)
33	61.2	1.38	(2.24)	100.6	0.59	(0.60)	235.6	0.86	(0.37)	358.6	1.76	(0.48)
34	60.0	1.00	(1.63)	100.1	0.28	(0.29)	235.1	0.72	(0.31)	357.5	0.97	(0.27)
35	59.0	0.83	(1.40)	100.0	0.48	(0.53)	234.8	0.34	(0.15)	357.1	0.83	(0.22)
36	58.2	0.83	(1.46)	99.6	0.34	(0.34)	234.8	0.79	(0.34)	356.8	0.76	(0.21)
37	57.4	1.10	(1.87)	99.5	0.55	(0.54)	234.4	0.41	(0.17)	356.6	0.83	(0.23)
38	56.5	1.14	(2.01)	99.2	0.52	(0.52)	234.2	0.34	(0.15)	356.4	0.66	(0.18)
39	55.5	0.66	(1.23)	98.8	0.55	(0.55)	234.1	0.41	(0.18)	356.2	1.21	(0.34)
40	55.0	0.86	(1.53)	98.3	0.41	(0.44)	234.2	0.59	(0.25)	355.2	0.83	(0.22)
41	54.2	0.83	(1.52)	98.2	1.07	(1.07)	233.9	0.38	(0.16)	354.9	0.41	(0.12)
42	53.4	1.03	(1.92)	97.3	0.48	(0.49)	233.9	0.41	(0.18)	354.8	0.97	(0.28)
43	52.4	0.72	(1.34)	97.0	0.41	(0.44)	233.8	0.45	(0.20)	354.2	0.62	(0.18)
44	51.8	0.45	(0.91)	96.7	0.28	(0.29)	233.7	0.72	(0.31)	354.4	1.10	(0.31)
45	51.4	0.69	(1.29)	96.5	0.38	(0.38)	233.4	0.66	(0.28)	353.7	0.97	(0.28)
46	50.9	0.76	(1.51)	96.4	0.76	(0.82)	233.0	0.31	(0.14)	353.4	0.28	(0.08)
47	50.2	0.72	(1.39)	95.8	0.24	(0.26)	233.0	0.93	(0.40)	353.5	0.83	(0.23)
48	49.6	0.41	(0.85)	95.6	0.55	(0.58)	232.4	0.34	(0.15)	353.0	0.48	(0.14)
49	49.2	0.48	(0.95)	95.2	0.48	(0.55)	232.3	0.24	(0.11)	353.1	0.76	(0.21)
50	48.7	0.55	(1.13)	95.0	0.28	(0.29)	232.2	0.62	(0.26)	352.7	0.59	(0.17)

NO PCLTF
(CONTINUED)
TABLE 5-11: SUMMARY OF FACILITY/FIRM BANKRUPTCY STATUS BY YEAR AND BY NET WORTH FOR NON-GOVERNMENT OWNED FACILITIES
YEAR 1 = FY1984; VALUES ARE MEANS OF 29 ITERATIONS

	FIRM NET WORTH IN 1982 DOLLARS											
	LESS THAN 10 MILLION			10 TO 100 MILLION			100 TO 1000 MILLION			GREATER THAN 1000 MILLION		
	SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES		SOLVENT	BANKRUPTCIES	
YEAR	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)	FACILITIES	NUMBER	(PERCENT)
51	48.2	0.48	(1.01)	94.9	0.38	(0.38)	231.9	0.76	(0.32)	352.5	0.90	(0.25)
52	47.8	0.55	(1.25)	94.9	0.79	(0.84)	232.0	0.34	(0.15)	352.4	0.86	(0.24)
53	47.5	0.52	(1.17)	94.6	0.59	(0.61)	232.6	0.79	(0.33)	353.2	0.97	(0.28)
54	47.2	0.55	(1.15)	94.6	0.28	(0.31)	232.8	0.41	(0.17)	353.9	0.48	(0.14)
55	46.8	0.69	(1.52)	94.9	0.48	(0.55)	233.7	0.69	(0.30)	354.8	0.62	(0.18)
56	46.4	0.34	(0.69)	94.7	0.38	(0.41)	234.0	0.24	(0.10)	356.0	0.62	(0.17)
57	46.4	0.45	(0.95)	94.7	0.34	(0.37)	234.7	0.55	(0.23)	356.9	0.72	(0.20)
58	46.1	0.45	(1.01)	94.9	0.34	(0.34)	235.2	0.59	(0.25)	357.4	1.90	(0.54)
59	45.7	0.52	(1.10)	94.9	0.48	(0.52)	235.6	0.45	(0.19)	356.8	0.41	(0.11)
60	45.4	0.28	(0.58)	94.9	0.45	(0.46)	236.1	0.45	(0.19)	357.9	0.52	(0.14)
61	45.2	0.76	(1.66)	95.0	0.31	(0.33)	236.0	0.83	(0.36)	358.9	0.72	(0.20)
62	44.6	0.55	(1.24)	95.1	0.38	(0.40)	236.0	0.48	(0.20)	359.1	0.55	(0.16)
63	44.4	0.34	(0.75)	95.2	0.34	(0.37)	236.3	0.76	(0.32)	359.6	0.52	(0.15)
64	44.3	0.28	(0.67)	95.1	0.38	(0.40)	236.6	0.41	(0.18)	360.3	0.62	(0.17)
65	44.2	0.52	(1.18)	94.9	0.34	(0.39)	237.1	0.55	(0.24)	361.0	0.90	(0.25)
66	43.8	0.24	(0.59)	94.9	0.38	(0.40)	237.2	0.55	(0.23)	361.1	0.79	(0.22)
67	43.8	0.45	(1.06)	94.9	0.34	(0.38)	237.0	0.38	(0.16)	361.5	0.34	(0.10)
68	43.4	0.38	(0.88)	94.8	0.45	(0.48)	237.4	0.31	(0.13)	362.2	0.48	(0.13)
69	43.2	0.31	(0.70)	94.6	0.38	(0.42)	237.8	0.55	(0.23)	362.6	1.00	(0.27)
70	43.1	0.28	(0.66)	94.3	0.34	(0.39)	237.9	0.48	(0.21)	362.8	0.38	(0.11)
71	43.1	0.48	(1.26)	94.6	0.28	(0.30)	238.2	0.79	(0.33)	363.7	0.48	(0.14)
72	42.9	0.24	(0.58)	94.6	0.07	(0.08)	237.9	0.17	(0.07)	364.3	0.14	(0.04)
73	42.9	0.59	(1.38)	95.0	0.59	(0.62)	238.2	0.31	(0.12)	365.4	0.72	(0.20)
74	42.5	0.41	(0.95)	94.8	0.69	(0.76)	238.3	0.34	(0.14)	365.5	0.69	(0.19)
75	42.1	0.31	(0.83)	94.4	0.48	(0.51)	238.7	0.34	(0.14)	365.8	0.45	(0.12)
76	41.9	0.24	(0.54)	94.0	0.28	(0.30)	238.9	0.86	(0.37)	366.3	0.69	(0.19)
77	41.9	0.28	(0.72)	94.0	0.38	(0.41)	238.6	0.72	(0.30)	366.4	0.41	(0.11)
78	41.8	0.31	(0.77)	93.8	0.38	(0.42)	238.3	0.31	(0.13)	366.4	0.72	(0.20)
79	41.6	0.21	(0.54)	93.8	0.28	(0.30)	239.0	0.76	(0.32)	366.6	0.66	(0.18)
80	41.4	0.21	(0.47)	93.8	0.52	(0.57)	238.8	0.66	(0.27)	366.9	0.52	(0.14)
81	41.3	0.38	(1.01)	93.7	0.59	(0.64)	238.8	0.83	(0.36)	367.3	1.48	(0.40)
82	41.0	0.17	(0.46)	93.2	0.55	(0.58)	238.3	0.97	(0.41)	366.8	1.24	(0.34)
83	40.9	0.21	(0.47)	93.1	0.38	(0.43)	237.8	0.66	(0.28)	366.5	0.48	(0.13)
84	40.8	0.24	(0.61)	93.2	0.17	(0.19)	237.8	0.76	(0.30)	367.1	0.86	(0.24)
85	40.7	0.34	(0.89)	93.4	0.52	(0.55)	237.7	0.55	(0.23)	366.9	1.21	(0.31)
86	40.4	0.21	(0.55)	93.1	0.28	(0.26)	237.9	0.48	(0.20)	366.3	0.83	(0.23)
87	40.3	0.24	(0.66)	93.1	0.34	(0.36)	237.9	0.72	(0.30)	366.6	1.07	(0.29)
88	40.1	0.17	(0.41)	93.1	0.41	(0.41)	237.6	0.79	(0.34)	366.3	0.86	(0.24)
89	40.0	0.14	(0.32)	92.8	0.41	(0.47)	237.5	0.52	(0.22)	366.1	0.93	(0.26)
90	39.9	0.14	(0.32)	92.7	0.14	(0.18)	237.6	0.41	(0.17)	366.1	1.31	(0.35)
91	39.9	0.17	(0.50)	92.7	0.31	(0.33)	237.7	0.48	(0.20)	365.4	0.41	(0.12)
92	39.9	0.28	(0.71)	92.7	0.55	(0.61)	237.7	0.83	(0.35)	365.8	0.93	(0.25)
93	39.8	0.07	(0.16)	92.4	0.31	(0.34)	237.5	0.69	(0.29)	365.5	1.07	(0.31)
94	39.8	0.07	(0.21)	92.4	0.45	(0.48)	237.2	1.07	(0.45)	365.1	0.93	(0.27)
95	39.8	0.34	(0.82)	92.2	0.38	(0.39)	236.5	0.24	(0.10)	365.4	0.21	(0.06)
96	39.6	0.14	(0.35)	92.1	0.14	(0.16)	236.9	0.38	(0.16)	366.1	0.69	(0.18)
97	39.5	0.17	(0.40)	92.1	0.34	(0.41)	236.9	0.34	(0.15)	366.3	0.79	(0.22)
98	39.4	0.14	(0.39)	92.0	0.28	(0.34)	237.0	0.55	(0.23)	366.6	0.86	(0.25)
99	39.4	0.24	(0.65)	91.9	0.52	(0.56)	236.9	0.76	(0.32)	366.7	1.38	(0.38)
100	39.3	0.24	(0.62)	91.6	0.28	(0.31)	236.7	0.76	(0.32)	365.8	0.83	(0.22)

```
NO PCLTF

TABLE  5-12: AVERAGE OCCURRENCE OF RELEASES FOLLOWING YEAR FACILITY OPENS
VALUES ARE MEANS OF 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS

DETECTION OF RELEASES AT EXISTING FACILITIES:
--------------------------------------------
                                    WITHIN 50 YEARS AFTER OPENING        WITHIN 75 YEARS AFTER OPENING
                                    -----------------------------        -----------------------------
                                    PROPORTION       YEARS               PROPORTION       YEARS
                                    WITH RELEASE     AFTER OPENING       WITH RELEASE     AFTER OPENING
RELEASE TYPE                        MEAN (STD.ERR)   MEAN (STD.ERR)      MEAN (STD.ERR)   MEAN (STD.ERR)
------------                        -----------------------------        -----------------------------
INDICATING PARAMETERS ON-SITE:       0.45 ( 0.00 )    4.6 (  0.1 )        0.47 ( 0.00 )    6.2 (  0.1 )
DETECTABLE  CONC. ON-SITE    :       0.41 ( 0.00 )    7.4 (  0.1 )        0.43 ( 0.00 )    9.5 (  0.1 )
TOXIC CONC. ON-SITE          :       0.31 ( 0.00 )    7.4 (  0.1 )        0.33 ( 0.00 )    9.7 (  0.2 )
TASTE/ODOR  OFF-SITE         :       0.08 ( 0.00 )   24.8 (  0.3 )        0.10 ( 0.00 )   30.1 (  0.3 )
DETECTABLE CONC. OFF-SITE    :       0.15 ( 0.00 )   22.9 (  0.2 )        0.18 ( 0.00 )   27.3 (  0.3 )
TOXIC CONC. OFF-SITE         :       0.12 ( 0.00 )   22.4 (  0.2 )        0.14 ( 0.00 )   26.6 (  0.3 )
BATHTUB EFFECT               :       0.0  ( 0.0  )    0.0 (  0.0 )        0.0  ( 0.0  )    0.0 (  0.0 )

DETECTION OF RELEASES AT NEW FACILITIES:
---------------------------------------
                                    WITHIN 50 YEARS AFTER OPENING        WITHIN 75 YEARS AFTER OPENING
                                    -----------------------------        -----------------------------
                                    PROPORTION       YEARS               PROPORTION       YEARS
                                    WITH RELEASE     AFTER OPENING       WITH RELEASE     AFTER OPENING
RELEASE TYPE                        MEAN (STD.ERR)   MEAN (STD.ERR)      MEAN (STD.ERR)   MEAN (STD.ERR)
------------                        -----------------------------        -----------------------------
INDICATING PARAMETERS ON-SITE:       0.04 ( 0.00 )   34.7 (  1.0 )        0.06 ( 0.00 )   49.0 (  1.6 )
DETECTABLE  CONC. ON-SITE    :       0.0  ( 0.0  )    0.0 (  0.0 )        0.0  ( 0.0  )    0.0 (  0.0 )
TOXIC CONC. ON-SITE          :       0.00 ( 0.00 )   32.0 (  0.0 )        0.00 ( 0.00 )   32.0 (  0.0 )
TASTE/ODOR  OFF-SITE         :       0.0  ( 0.0  )    0.0 (  0.0 )        0.0  ( 0.0  )    0.0 (  0.0 )
DETECTABLE CONC. OFF-SITE    :       0.0  ( 0.0  )    0.0 (  0.0 )        0.0  ( 0.0  )    0.0 (  0.0 )
TOXIC CONC. OFF-SITE         :       0.0  ( 0.0  )    0.0 (  0.0 )        0.0  ( 0.0  )    0.0 (  0.0 )
BATHTUB EFFECT               :       0.0  ( 0.0  )    0.0 (  0.0 )        0.0  ( 0.0  )    0.0 (  0.0 )

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```

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NO PCLTF

TABLE  5-13A: CAPITAL AND O&M COSTS: (THOUSANDS OF 1982 DOLLARS)
STATISTICS ARE FOR OBSERVATIONS GENERATED FOR 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS
                                                                                    FRACTION OF TIMES
ACTION                                 OBSERVATIONS     MINIMUM        MEAN      MAXIMUM   UNABLE TO ALLOCATE COST
------                                 ------------     -------        ----      -------   -----------------------
MONITORING:
-----------
INDICATING PARAMETERS ON-SITE     K:              0         0.0         0.0          0.0
                                O&M:          37286         2.7         4.6          6.5          0.3103

CONSTITUENTS ON-SITE              K:              0         0.0         0.0          0.0
                                O&M:          23007         3.4         5.4          8.3          0.5028

PLUME DELIN. & TRACKING ON-SITE   K:              0         0.0         0.0          0.0
                                O&M:              0         0.0         0.0          0.0          0.0

CONSTITUENTS OFF-SITE             K:          12361        25.0        37.5         50.0
                                O&M:          12770         1.8         2.4          3.0          0.0

PLUME DELIN. & TRACKING OFF-SITE  K:              0         0.0         0.0          0.0
                                O&M:              0         0.0         0.0          0.0          0.0

RESPONSE:
---------
SURFACE SEALING                   K:          12445         6.5       275.7      17678.4
                                O&M:              0         0.0         0.0          0.0          0.0

FLUID REMOVAL & TREATMT ON-SITE   K:          12445        41.3       136.7       3837.1
                                O&M:          12445        33.0       121.8       5046.8          0.0

FLUID REMOVAL & TREATMT OFF-SITE  K:           4786         0.0       248.7       3687.2
                                O&M:           4818         0.0       255.6       4872.6          0.0

ROUTINE CARE:
-------------
POST-CLOSURE CARE                 K:              0         0.0         0.0          0.0
                                O&M:          27217         0.5         7.8        124.8          0.5422
-----------------------------------------------------------------------------------------------------------------------


TABLE  5-13B: GENERATED CLAIMS (THOUSANDS OF 1982 DOLLARS)
STATISTICS ARE FOR OBSERVATIONS GENERATED FOR 29 ITERATIONS; DURATION OF ANALYSIS IS 100 YEARS
                                                                                   FRACTION OF          FRACTION OF
                                                                                   GENERATED CLIAMS     VALID CLAIMS
CLAIMS:                                OBSERVATIONS     MINIMUM        MEAN      MAXIMUM   NOT LEGALLY VALID    NOT COMPENSATED
-------                                ------------     -------        ----      -------   -----------------    ---------------
                    PERSONAL INJURY:           2157         4.0    280480.7   10579005.0          0.1615            0.2110

                      REAL PROPERTY:           5348         0.1      1506.1     152721.5          0.2195            0.1232

                      ECONOMIC LOSS:           2860        60.0      5895.1      45265.0          0.2655            0.2021

            NATURAL RESOURCE DAMAGE:           3673       606.7       606.5        606.7          0.0000            0.0

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POST-CLOSURE LIABILITY TRUST FUND SIMULATION MODEL:

VOLUME III: MODEL DESCRIPTION

Office of Solid Waste
U.S. Environmental Protection Agency

May 1985

POST-CLOSURE LIABILITY TRUST FUND SIMULATION MODEL:

VOLUME III: MODEL DESCRIPTION

Office of Solid Waste
U.S. Environmental Protection Agency

May 1985

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PREFACE

This report is the joint effort of two co-contractors, ICF Incorporated and Battelle Pacific Northwest Laboratories. Battelle Pacific Northwest Laboratories developed the Release Simulation Model, a model that predicts facility releases. ICF Incorporated developed the overall Post-Closure Liability Trust Fund Simulation Model, which uses the results of the Release Simulation Model to assess the adequacy of the PCLTF.

This report is organized in three volumes, as follows.

Volume I, "Model Overview and Results," introduces the Post-Closure Liability Trust Fund and presents background information on the RCRA program; describes in general terms the PCLTF Simulation Model and how it is used; presents Model results for five simulations; presents an analysis of the revenue requirements under alternative Fund coverage policies; and presents a discussion of necessary limitations and next steps.

Volume II, "Graphs and Tables of Model Results," presents the graphs and tables that contain the Model results discussed in Volume I. Volume II is separately bound so that the reader can conveniently peruse the Model output when reading the Volume I report.

Volume III, "Appendices," contains four appendices that provide technical detail on various aspects of the Model. Appendix A presents detail on methods, data and assumptions used in the PCLTF Simulation Model. Appendix B provides detail on the Release Simulation Model. Appendix C describes several aspects of model implementation for both the PCLTF Simulation Model and Release Simulation Model, including run characteristics, subroutines, data files, random number generators, and statistical properties of the results. Appendix D reproduces the set of options available to the Model user.

This study was conducted under the guidance of EPA's Office of Solid Waste. Ms. Carole Ansheles, the Project Officer, and her associate Mr. Richard Allan were in charge of this project. Mr. Peter Guerrero was the former Project Officer.

APPENDIX A

DETAILED MODEL DESCRIPTION

This appendix describes the PCLTF Simulation Model. The goal is to lay open for examination all the assumptions, data, data analyses, and simulation techniques that underly the Model. This material is not a "users' manual"; flow charts and program codes are not presented. Instead, this appendix concentrates on presenting the substantive workings of the Model.

Recognizing that a detailed description of a model as large and complex as the PCLTF Simulation Model would necessarily be quite lengthy, this appendix is organized to enable the reader to refer selectively to individual topics of interest. For example, an individual interested in examining the Model's methods for calculating the costs of response actions can easily identify the relevant material for review without reading the entire appendix. This appendix is organized as follows:

- **A.1 Model Overview** provides a brief overview of the entire Model. All readers should review this brief section to become familiar with the overall flow of the Model.
- **A.2 Estimation of Basic Model Units** describes each of the major building blocks of the Model. Each building block is defined, and the data used and data analyses performed to estimate each building block are described. The basic model units are:
    - -- Facility Population;
    - -- Facility-Level Characterization;
    - -- Modeling of Releases;
    - -- Actions;
    - -- Claims; and
    - -- Funding Sources.
- **A.3 Relationships Among Basic Model Units** describes how the major building blocks relate to each other. The relationships can be divided into six types:
    - -- Economic Relationships;
    - -- Regulatory Policy;
    - -- Financial Relationships;
    - -- Cost Allocation Policy;
    - -- The Effect of Response Actions on Releases; and
    - -- The Legal Validity of Claims.

A.1 MODEL OVERVIEW

As displayed in Exhibit A-1, the PCLTF Model analysis proceeds as follows:

- The estimate of the population of land disposal facilities over time is based on economic relationships describing the supply of and demand for land disposal of hazardous waste.

- For each facility in the facility population, a facility-level characterization is performed which estimates a series of characteristics (such as facility size and design). Based on these characteristics and data defining the modeling of releases, the facility's potential releases are estimated.

- The potential releases at a facility are an important driving influence of the facility-level characterization. Given the actions characterized at the facility based on the action data, potential releases may be detected. Then, in conjunction with regulatory policies and the effects of response actions on releases, the detected releases lead to additional monitoring actions, response actions, and claims. The costs of these actions and claims are estimated using the action data and claim data.

- The costs of the actions and claims estimated at the facility level are allocated to the available funding sources according to specified cost allocation policies. The PCLTF is one of the potential funding sources available to cover costs that arise at the facility level. Various issues regarding the legal validity of third-party claims also play a role.

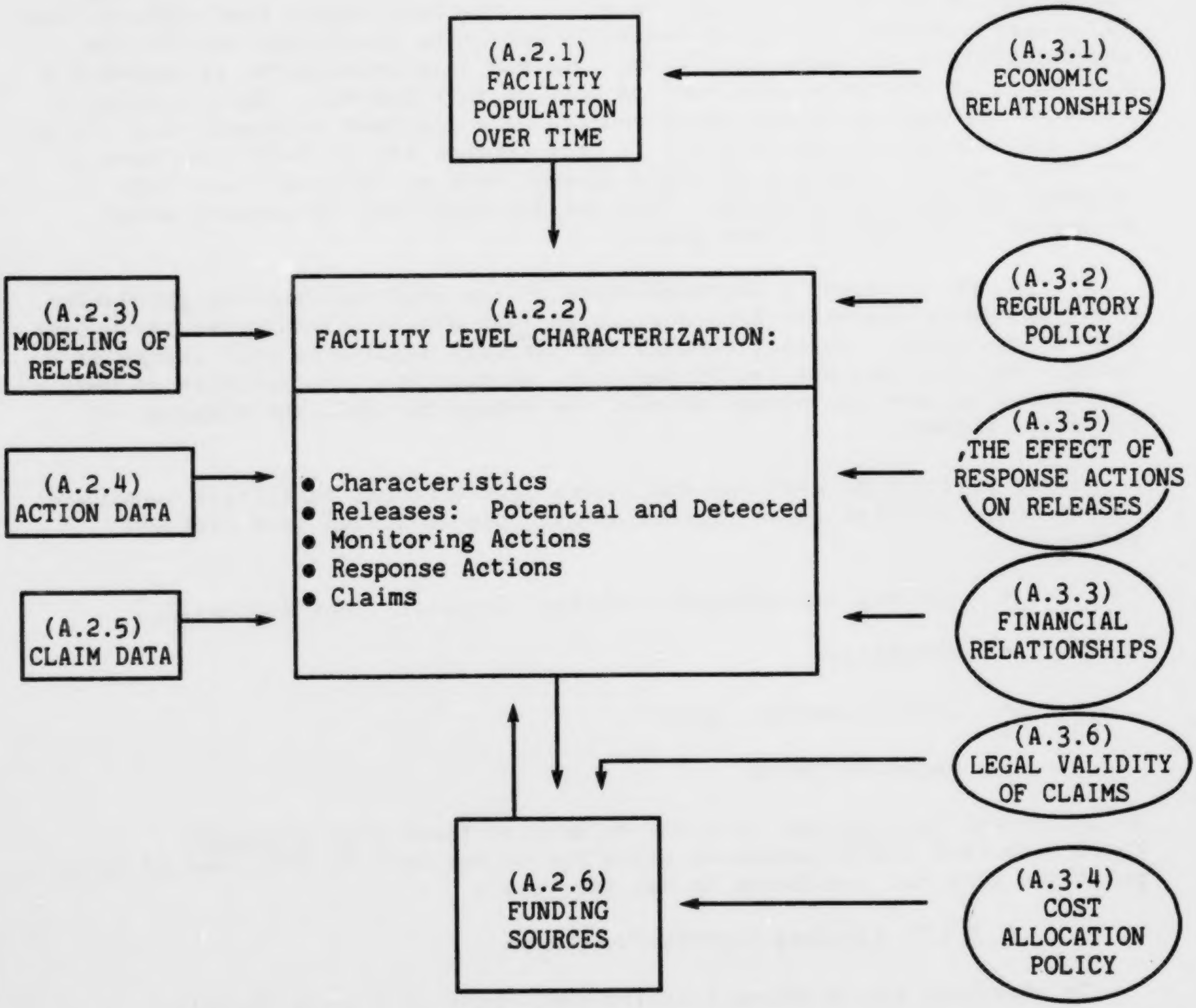
- If costs are allocated to the owner/operator, the firm may be more likely to go bankrupt. Using the financial relationships, the viability of firms is assessed to reflect the influence of actions and claims costs on firms. If a firm goes bankrupt, its facilities cease accepting waste and it is no longer available to cover costs.

- An important feedback between funding sources and the facility-level characterization exists. If no funding source is available for a monitoring or response action, then the action is not taken. This feedback is important because a response action can prevent additional releases from occurring at a facility. Consequently, not having a funding source for certain actions may lead to additional numbers of releases.

The following two sections describe the basic units and relationships included in the PCLTF Model. These sections are organized according to Exhibit A-1, which lists the relevant section numbers in parentheses.

EXHIBIT A-I

SIMPLIFIED REPRESENTATION OF THE PCLTF SIMULATION MODEL ANALYSIS[1]


(A.2.1)
FACILITY
POPULATION
OVER TIME
(A.3.1)
ECONOMIC
RELATIONSHIPS
(A.2.3)
MODELING OF
RELEASES
(A.2.2)
FACILITY LEVEL CHARACTERIZATION:
• Characteristics
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(A.3.6)
LEGAL VALIDITY
OF CLAIMS
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FUNDING
SOURCES
(A.3.4)
COST
ALLOCATION
POLICY

---

[1] Rectangles display basic model units. Ovals display the relationships among the basic model units. Numbers in parentheses refer to the section in Appendix A.

A.2 ESTIMATION OF BASIC MODEL UNITS

A.2.1 Facility Population

In order to estimate PCLTF expenditures over time, it was necessary to estimate the current and future population of land disposal facilities. Despite the fact that there exist several surveys of hazardous waste disposal facilities in the United States, no single data base exists that contains both (1) a comprehensive listing of currently operating facilities and (2) the characteristics of these facilities. Because this information is needed for the Model, it had to be developed as part of this project. Three sources of relevant information exist; these sources were analyzed to ensure that (1) all relevant information was used and (2) the current set of facilities used in the Model agrees closely with EPA's current best estimate of their land disposal process distribution. This section describes the several steps performed to accomplish these goals.

First, we developed a representation of the existing facility population, i.e., currently-operating hazardous waste land disposal facilities throughout the United States. Second, because the facility population will change as facilities close and new facilities open, we simulated the addition of new facilities as they are needed to meet the demand for the land disposal of hazardous wastes.

The population of existing and future land disposal facilities considered in the model includes those facilities with the following land disposal processes:

- surface impoundments (storage, treatment, and disposal);
- landfills;
- land treatment; and
- injection wells.

An individual facility may have one or more of these four processes. Facilities that handle hazardous waste but do not have at least one of these processes were not considered in our analysis.

A.2.1.1 Existing Facility Population

To represent the existing facility population (i.e., the facility population as of October 1, 1983, which is the beginning of year 1 of the PCLTF Model), we constructed and analyzed a data base containing facility information from the most recent data describing Interim Status facilities. This newly-created data base is called the facility data file. The three data sources employed in constructing the facility data file were:

- Part A Permit Application Data (1979-1980), which identify approximately 2,600 land disposal facilities;

- Telephone Verification Survey Data (1982) for approximately 1,171 of the 2,600 facilities identified in the Part A Data; and
- National Mail Survey of RCRA-Regulated Hazardous Waste Handlers Data (1983), which provide the best estimates of the current aggregate facility population and additional detailed information on a small number of land disposal facilities.

Each of these data sources has strengths and weaknesses. No one source provides a fully comprehensive and verified listing of facilities that currently operate one or more of the land disposal processes analyzed in the Model.

To use the strengths of each source of information, we devised a procedure to estimate the relationships among the data sources and EPA's current best estimate of the size of the existing facility process population.[1] These estimated relationships were then used in the PCLTF Simulation Model along with the Part A and TVS data to simulate the existing facility population. First, the statistics themselves are described along with the procedure used to estimate them. Then, the method used to simulate the existing facility population is presented.

Relationships Among the Data Sources Describing the Existing Facility Population

To estimate the existing facility population, we first created a data base of facility-specific information using the Part A Data and the Telephone Verification Survey (TVS) Data. We then analyzed this data base in conjunction with the results of the Mail Survey to estimate the relationships among the three sources. The relationships enable the Model to simulate a comprehensive facility population using all the data that are currently available.

The most accurate of the three data sources was assumed to be the Mail Survey Data, followed by the TVS Data, and then the Part A Data. However, only Part A Data are available for all 2,600 facilities that may have land disposal processes. TVS Data are available for 1,171 of the 2,600 Part A facilities and Mail Survey Data are available for only 672.[2] This means that neither the Mail Survey Data nor the TVS Data alone are sufficient for simulating the population of existing land disposal facilities.

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[1] U.S. Environmental Protection Agency, "National Survey of Hazardous Waste Generators and Treatment, Storage, and National Disposal Facilities Regulated under RCRA in 1981: Preliminary Highlights of Findings," August 30, 1980.

[2] While the Mail Survey responses were not random, indicating that these data may be biased, the Survey's high response rate suggests that potential bias may not be a serious problem. See footnote 1.

To overcome this lack of TVS and Mail Survey data, the following statistics were estimated to describe the relationship among the data sources:

- Probability of observing a particular TVS response given the observed Part A response; and
- Probability of observing a particular Mail Survey response given the observed TVS response.

Given that Part A Data are available for all the facilities and TVS data are available for many, these statistics can be used to simulate what the Mail Survey response would have been for each facility.

To estimate the relationship between the Part A and TVS data, we compared the process data for the 1,171 facilities reporting both sets of data. Exhibit A-2 displays the Bayesian probabilities estimated as a result of this comparison.[3] For example, 0.92 (or 92 percent) of the facilities reporting at least one surface impoundment in the Part A Data also reported at least one in the TVS Data. Conversely, 48 percent that did not report a surface impoundment in the Part A Data did report one or more in the TVS Data.

Using these probabilities and the Part A and TVS data, we estimated the frequency with which each of the 15 combinations of disposal processes is anticipated to occur at the facilities. These probabilities, reported in Exhibit A-3, were constructed as follows:

1) Using those facilities with Part A Data (but without TVS Data), count the number of times each of the 15 facility configurations occurs;

2) Using the Bayesian probabilities reported in Exhibit A-2, estimate the probabilities with which each Part A Data-based observation could result in each of the 15 configurations (e.g., the probability of an observed Part A configuration 1 resulting in a TVS-adjusted configuration 1 is: (0.92)(1.0-0.06)(1.0-0.04)(1.0-0.02) = 0.81);

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[3] Bayes' Theorem forms the basis of the Bayesian analysis performed here. Bayes' Theorem is:

$$P\,(H/E) = \frac{P(E/H) \cdot P(H)}{P(E)}$$

where the variables E and H represent Part A and TVS responses, respectively. For an explanation of Bayes' Theorm, see an introductory probability text such as Probability with Statistical Applications by F. Mosteller, R. Rourke, and G. Thomas, (Reading, Massachusetts: Addison-Wesley Publishing Company, 1970), pp. 158-164.

EXHIBIT A-2

BAYESIAN PROCESS PROBABILITIES DEVELOPED BY COMPARING THE PART A DATA AND THE TELEPHONE VERIFICATION SURVEY DATA[1]

Part A Response by Process	Bayesian Probability of Having this Process in the TVS Data Given the Part A Response
Surface Impoundment:	
YES	0.92
NO	0.48
Landfill:	
YES	0.70
NO	0.06
Land Treatment:	
YES	0.70
NO	0.04
Injection Well:	
YES	0.87
NO	0.02

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[1] Based on 1,171 observations.

EXHIBIT A-3

FREQUENCY DISTRIBUTION OF FACILITY CONFIGURATIONS[1]

	Facility Configuration[2]				Probability of Occurrence Based on TVS/Part A Analysis	Probability of Occurrence Adjusted for Mail Survey Results
	SI	LF	LT	IW		
1.	Y	N	N	N	.676	.673
2.	N	Y	N	N	.093	.147
3.	N	N	Y	N	.045	.049
4.	N	N	N	Y	.041	.066
5.	Y	Y	N	N	.067	.032
6.	Y	N	Y	N	.025	.009
7.	Y	N	N	Y	.021	.012
8.	Y	Y	Y	N	.012	.002
9.	Y	Y	N	Y	.005	.001
10.	Y	N	Y	Y	.005	.001
11.	Y	Y	Y	Y	.001	.000[3]
12.	N	Y	Y	N	.005	.002
13.	N	Y	N	Y	.003	.004
14.	N	Y	Y	Y	.001	.000[4]
15.	N	N	Y	Y	.000	.002
					1.000	1.000

---

[1] Based on 1,171 TVS observations and 1,429 Part A observations.

[2] SI = Surface Impoundment; LF = Landfill; LT = Land Treatment; IW = Injection Well

[3] Less than 0.0001.

[4] Less than 0.0005.

3) Multiply the probabilities estimated in step 2 times the number of observations from step 1 to estimate the expected number for each configuration from those facilities with only Part A Data;

4) Count up the number of each configuration observed in the TVS Data, and add to the results of step 3; and

5) Calculate the probability with which each configuration is expected to occur by dividing the estimated number for each configuration by the total number of facilities expected to have at least one of the four disposal processes (approximately 200 of the original 2,600 facilities are expected not to have any of the four disposal processes).

This procedure produced the TVS/Part A distribution in Exhibit A-3 and the expected number of each disposal process reported in the first row of Exhibit A-4.

These estimates were then adjusted for the Mail Survey results using an estimate of the relationship between the TVS Data and the Mail Survey Data. The TVS/Mail Survey relationship was estimated based on the results of the Part A/TVS analysis (described above) and EPA's estimate of the number of each disposal process believed to exist today (see the second row of Exhibit A-4), which is based on the Mail Survey results.

An eligibility rate was calculated for each process (see the fourth row of Exhibit A-4). These rates were interpreted as the probability of actually having each process (as indicated by the Mail Survey), given that it was reported in the TVS (as indicated by the results of the Part A/TVS analysis). These probabilities were used to estimate the expected likelihood that each of the TVS-observed configurations could be a Mail Survey-adjusted configuration (e.g., TVS configuration 5 has a (0.40 x 0.45 = 0.18) chance of being a Mail Survey-adjusted configuration 5, a (0.40)(1.0-0.45) = 0.22 chance of being a Mail Survey-adjusted configuration 1, a (1.0-0.40)(0.45) = 0.27 chance of being a Mail Survey-adjusted configuration 2, and a (1.0-0.40)(1.0-0.45) = 0.33 chance of having no land disposal process after the Mail Survey adjustment). These likelihoods were multiplied by the TVS/Part A probabilities of occurrence and summed across the 15 configurations. The total was 0.44, meaning that overall, there is a 0.44 (or 44 percent) chance that a facility which reported having at least one land disposal process in the TVS would actually have at least one process (as indicated by the Mail Survey results).

The distribution across the 15 facility configurations was normalized using this 0.44 estimate to produce the Mail Survey-adjusted probabilities reported in Exhibit A-3. The results of these statistics (i.e., the Bayesian probabilities in Exhibit A-2, the calculated eligibility rates in Exhibit A-4, and the probabilities of the configurations in Exhibit A-3) are displayed on an expected value basis in the fifth row of Exhibit A-4. These estimates closely match the EPA estimates of the current number of each land disposal process in existence today. The manner in which these statistics were used in the PCLTF Model to simulate the existing facility population is described next.

EXHIBIT A-4

ADJUSTMENT OF POPULATION ESTIMATE FOR MAIL SURVEY RESULTS

		Surface Impoundments	Landfills	Land Treatment	Injection Wells	Facilities
1.	Expected Value Based on TVS and Part A[1]	1,946	448	225	184	2,395
2.	EPA Estimate[2]	770	200	70	90	-
3.	EPA-Reported Eligibility Rate[2]	0.49	0.46	0.37	0.42	-
4.	Calculated Eligibility Rate (2÷1)	0.40	0.45	0.31	0.49	-
5.	Mail Survey-Adjusted Expected Value	769	198	68	90	980

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[1] Calculated by applying the probabilities reported in Exhibit A-2 to the facility data file to estimate the number of facilities, and then using the TVS/Part A analysis probabilities reported in Exhibit A-3 to estimate the number of each process.

[2] U.S. Environmental Protection Agency, "National Survey of Hazardous Waste Generators and Treatment, Storage, and Disposal Facilities Regulated Under RCRA in 1981: Preliminary Highlights of Findings," August 30, 1983.

Simulating the Existing Facility Population

The results of the above analysis provided the relationships needed to simulate probabilistically an existing facility population for the PCLTF Model. On an expected value basis (i.e., on average), this facility population closely resembles the existing facility population in the United States as estimated by EPA. It also reflects the current uncertainty surrounding the true size of the facility population. The number of existing Interim Status facilities simulated in each iteration of a model run will vary due to the probabilistic simulation approach adopted. Because this variance may influence the PCLTF balance, the Model results reflect the uncertainty surrounding the size of the facility population.

We used the following procedure in simulating the existing facility population:

1. For each of the 2,600 facilities in the facility data base, the types of land disposal processes reported to be present and the source of the data (either Part A or TVS) were identified.

2. These data were adjusted probabilistically as follows to reflect the TVS results:

    - If TVS is the source of the data and a land disposal process is reported, then the facility is assumed to have at least one land disposal process.

    - If the data source is Part A, whether a land disposal process exists is determined probabilistically using the Bayesian probability of having a specific process in the TVS Data, given the Part A Data. (This is done using a pseudo-random number and comparing it to the associated probability for each of the processes.) If one or more processes is simulated to exist, the facility moves on to step 3. If none are simulated to exist, the facility is dropped from the iteration.

3. If one or more land disposal processes exist at the facility according to step 2, then we determined probabilistically whether the facility exists according to the Mail Survey results. Each facility has a 0.44 chance of existing at this step.

4. If one or more land disposal processes exist at the facility according to step 3, then the facility became part of the simulated existing facility population for that iteration of the Model run. The characteristics of that facility were estimated based in part on the Part A Data available for that facility and based in part on estimates of facility characteristics in the overall population (based on analyses of the TVS and Mail Survey data). The manner in which facility characteristics were simulated (for both existing and new facilities) is discussed below in Section A.2.2, Facility-Level Characterization.

Using the above procedure for each facility, we determined the population of existing facilities for the PCLTF Model. Because the adjustments and simulations in this process are based on probabilities, the simulated number of facilities (generated with the use of pseudo-random numbers) will vary. The expected value (i.e., the average) of the number of facilities and processes in the existing facility population is reported in row 5 of Exhibit A-4.

A.2.1.2 New Facility Population

New facilities are added to the facility population over time as additional capacity is required to meet the demand for land disposal of hazardous wastes. In Simulation 1, the demand for land disposal of hazardous waste was assumed to decrease by 2 percent per year for the first 50 years and then to remain constant for the following 50 years. In addition, the average capacity of new facilities was assumed to grow by 1 percent per year to reflect increases in the size and efficiency of new land disposal processes over time. Using these values results in approximately 185 new facilities being added over the next 100 years within the United States.

It should be noted that the future demand for land disposal of hazardous waste is very uncertain. Proposals are currently being considered to ban or restrict the land disposal of hazardous waste in the near future. Whether these proposals are enacted will influence the future demand for land disposal, and consequently, the estimate of the future size of the facility population. Due to this uncertainty, the Model was configured to allow a wide variety of assumptions regarding the future demand and supply of land disposal. The Model does, however, ensure that the assumptions used are iternally consistent. Several economic relationships are used which constrain supply and demand to be approximately equal over time. These relationships are described in Section A.3.1, Economic Relationships.

A.2.2 Facility-Level Characterization

Each facility in the facility population was characterized in detail within the Model. Because detailed facility-specific data were not available for most facilities, the values for their characteristics were simulated using descriptors of the distribution of facility characteristics within the facility population. For example, based on the 44 landfill responses to the Mail Survey, the distribution of landfill size (in acres) in the existing facility population was estimated. This distribution was then used to simulate the sizes of existing landfills within the Model. The size distribution of new landfills (those simulated to open in the future) may, of course, differ from the distribution for existing landfills. Consequently, a size distribution for new landfills was assumed because new (i.e., future) landfills do not yet exist.

The characteristics simulated at the facility level were divided into two types: milestones and attributes. Milestones are activities that every facility must perform at some point in time. For example, every facility must eventually close (i.e., cease accepting hazardous waste for land disposal). Milestones were simulated at the facility level by estimating when they occur. Attributes, on the other hand, describe the facility at a point in time. For example, the size of a landfill is a facility attribute. The size was simulated by estimating a particular value, e.g., 2 acres.

Both the milestones and attributes are important descriptors of the facility-level analysis performed in the Model. Together they provide a description of the level of resolution or detail inherent in the Model. In reading the following sections on milestones and attributes, the reader will be able to identify the major facility characteristics used to simulate the performance of land disposal facilities.

A.2.2.1 Facility Milestones

The importance of facility milestones is that they identify points in time during a facility's life at which important determinations or decisions are made. In particular, the timing of these milestones will influence the allocation of costs among potential funding sources (i.e., PCLTF, state funds, Superfund, and the owner/operator). By simulating these key decision points, the Model analysis can represent the dynamic aspects of a facility's life cycle.

Below, we discuss seven facility milestones: facility begins handling hazardous waste for land disposal; owner/operator applies for a final RCRA permit; facility ceases accepting hazardous wastes for disposal; EPA determines if the facility is eligible for PCLTF coverage; termination of all business activity by the owner/operator; owner/operator stops performing routine post-closure care and monitoring; and the end of the post-closure care period.

Facility Begins Handling Hazardous Waste for Land Disposal

The year in which existing facilities opened (the year the facility began accepting hazardous wastes for land disposal) was simulated based on Part A and Mail Survey data. The Mail Survey Data were used to derive a frequency distribution of the open year (see Exhibit A-5). This distribution was used to simulate an open year for those existing facilities which did not have Part A Data describing their open year. Using this distribution, for example, a facility has a 0.36 chance of having an open year between 1970 and 1979.

Both the Part A Data and Mail Survey Data were used to estimate a relationship between the Part A Data and the Mail Survey responses based on facilities that were included in both data sets (see Exhibit A-6). This relationship was used to adjust, probabilistically, the Part A open year responses to reflect the Mail Survey responses. For example, if a facility's Part A open year response was 1965, it would have a 0.68 chance of having a simulated open year between 1960 and 1969. It would also have a chance of being opened between 1910 and 1919 (0.03), 1930 and 1939 (0.02), 1940 and 1949 (0.02), 1950 and 1959 (0.05), 1970 and 1979 (0.18), and 1980 and 1983 (0.02). To determine the open year, a random number was drawn and compared to these probabilities to identify the open year range. Then, a year was drawn from the identified range. This approach enabled all the available data to be used

EXHIBIT A-5

DISTRIBUTION OF OPEN YEARS REPORTED IN MAIL SURVEY DATA[1]

Range of Open Year	Probability
1850-1899	0.00[2]
1900-1909	0.00[2]
1910-1919	0.02
1920-1929	0.02
1930-1939	0.03
1940-1949	0.07
1950-1959	0.13
1960-1969	0.21
1970-1979	0.36
1980-1983	0.16
	1.00

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[1] Based on 316 observations.

[2] Less than 0.01.

EXHIBIT A-6

PROBABILITIES OF MAIL SURVEY RESPONSES GIVEN PART A RESPONSES FOR OPEN YEARS 1/

Part A Response	Number of Observations	Mail Survey Responses 1850-1899	1900-1909	1910-1919	1920-1929	1930-1939	1940-1949	1950-1959	1960-1969	1970-1979	1980-1983	Total
1900-1909	7	0.14	0.29	0.0	0.0	0.0	0.0	0.14	0.14	0.0	0.29	1.0
1910-1919	4	0.0	0.0	0.75	0.0	0.0	0.0	0.25	0.0	0.0	0.0	1.0
1920-1929	10	0.0	0.0	0.0	0.40	0.0	0.20	0.0	0.10	0.0	0.30	1.0
1930-1939	15	0.0	0.0	0.0	0.0	0.53	0.07	0.0	0.07	0.13	0.20	1.0
1940-1949	21	0.0	0.0	0.0	0.0	0.0	0.62	0.05	0.05	0.19	0.09	1.0
1950-1959	53	0.0	0.0	0.0	0.0	0.0	0.06	0.51	0.13	0.17	0.13	1.0
1960-1969	60	0.0	0.0	0.03	0.0	0.02	0.02	0.05	0.68	0.18	0.02	1.0
1970-1979	98	0.0	0.0	0.0	0.02	0.0	0.01	0.01	0.09	0.78	0.09	1.0
1980-1983	13	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.92	1.0

1/ Based on 281 obervations from both the Part A Data and the Mail Survey Data.

and provided open year estimates which had less variance than if the Part A Data had been excluded from consideration.

New facilities were simulated to begin operation as required to meet the demand for land disposal. Consequently, the open year for a new facility is simply the year in which it is simulated to come on line.

Owner/Operator Applies for a Final RCRA Permit

Because all new facilities are required to open with a RCRA permit, applying for a final permit is applicable only to owner/operators of existing facilities.

The year in which an existing facility will apply for a final RCRA permit was based on an assumed rate at which EPA will require and review permits at existing facilities. Because EPA anticipates that all existing facilities will be reviewed within the next five years, we simulated the following: 5 percent of the existing facilities will be requested to submit final permit applications in each of the next two years, and 30 percent will be requested to submit applications in each of the following three years. Each existing facility has an equal chance of being requested to submit its application in each of the five years. No relationship between other facility characteristics (e.g., groundwater contamination) and the date of permit application is assumed.

The determination of whether the facility is granted or denied a permit is based on an assumed RCRA permitting policy and the simulated groundwater quality at the facility. In the current simulations, evidence of groundwater contamination was not assumed to result in a permit being denied. However, alternative permitting policies may be examined; these are discussed in Section A.3.2, Regulatory Policy.

Facility Ceases Accepting Hazardous Wastes for Disposal

The year in which a facility ceases accepting and disposing of hazardous wastes is called the year of closure. Closure marks the beginning of two important time periods:

- **Qualification Period**: Period during which the facility is monitored to determine if it can transfer liabilities to the PCLTF at the end of this period; and
- **Post-Closure Period**: The period during which the owner/operator is required by his permit to perform post-closure care. (Note: facilities may excavate and decontaminate their land disposal processes at closure, thereby avoiding any post-closure requirements.)

The closure year was determined by simulating a facility lifetime and adding it to the year in which land disposal was simulated to have begun. The facility lifetime was simulated by drawing from a lognormal distribution of facility life developed from 174 responses to the Mail Survey. Exhibit A-7

EXHIBIT A-7

FACILITY LIFETIMES

Range of Expected Lifetime (Years)	Observed Frequency[1]	Expected Frequency[2]
0-10	18	11.3
10-15	17	16.3
15-20	18	18.0
20-25	11	17.4
25-30	17	15.7
30-35	10	13.5
35-45	20	21.5
45-55	15	15.5
55-70	11	15.3
70-100	16	15.5
100	21	14.0
	174	174.0

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[1] Based on 174 observations from Mail Survey.

[2] Estimated using lognormal distribution (3.49651, 0.7876, 0.0).

compares the observed lifetime distribution (from the Mail Survey) to the expected frequency of lifetime observations attained using a three-parameter lognormal distribution with a mean of 45 years and a median of 33.[4] A chi-square statistic of 12.2 was obtained from the difference between the two distributions shown in Exhibit A-7, indicating that the hypothesis that the observed distribution was drawn from the hypothesized lognormal distribution cannot be rejected at the 10 percent level of significance. Consequently, because the continuous log normal distribution reflects the available empirical data, it is used to model the closure year. Based on discussions with EPA, it was believed that new facilities would have longer lifetimes than indicated by the data used here to describe the lifetime of existing facilities. Consequently, the lifetimes of new facilities were simulated by drawing from the above distribution and then adding 15 years.

EPA Determines if the Facility is Eligible for PCLTF Coverage

At this milestone, EPA must determine whether closed facilities will qualify for PCLTF coverage. In the current PCLTF statute, this time is five years following closure. Prior to the five years after closure, the facility's PCLTF qualification is said to be "pending." At the time when qualification is determined, the facility becomes either "qualified" or "unqualified."

The Model is configured to allow the timing of this qualification determination to vary. The user specifies the number of years following closure when the determination is initially made at all facilities. (The value used must be greater than or equal to zero.) The same time period must apply to all facilities.

The decision rules upon which a qualification determination is based must reflect the CERCLA requirements for coverage.[5] However, the regulations interpreting the requirements have not yet been promulgated by EPA. Consequently, the Model is designed to allow a variety of decision rules to be examined. In the current simulations, any evidence of a release disqualifies a facility from Fund coverage. Section A.3.4, Cost Allocation Policy, describes in detail how the decision rules were constructed and applied.

Termination of All Business Activity by the Owner/Operator

At any point in time, an owner/operator may terminate all business activity by declaring bankruptcy. At bankruptcy, the owner/operator's facility (or facilities) cease accepting hazardous waste for disposal (if they are in operation) and the owner/operator is no longer an available funding source for costs. If an alternative funding source is not available to cover ongoing actions, then the actions are terminated.

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[4] The lognormal parameters are: $\mu = 3.49651$, $\sigma = 0.7876$, and minimum = 0. Note: the mean and median of the distribution are defined as:

- mean = $\exp(\mu + 1/2\sigma^2)$ + minimum; and
- median = $\exp(\mu)$ + minimum.

[5] See CERCLA, section 107(k).

The rate at which bankruptcies occur is based on the financial characteristics of the firms owning hazardous wastes disposal sites and on the costs simulated to be incurred by these firms. In this section, we discuss these financial characteristics. Section A.3.3, Financial Relationships, discusses how bankruptcies are simulated using the financial characteristics and the simulated costs.

Firms are classified according to several financial characteristics: net worth, total assets, ownership status, and number of facilities owned. Exhibit A-8 presents the distribution of firms currently owning land disposal facilities. The exhibit shows 61 types of facility owners. Each type is defined by its probability of occurrence and its characteristics (net worth, etc.). The net worth and total assets are used to simulate the firm's likelihood of bankruptcy.[6] A firm's ownership status may be government owned or non-government owned. Government ownership may be at the federal, state or municipal level. As shown in Exhibit A-8, government-owned facilities do not have a net worth or total assets associated with them. Because government-owned facilities are assumed to not go bankrupt, these values are not required. Non-government ownership includes private ownership, public ownership, and foreign ownership. Firm types 1 thru 58 in Exhibit A-8 indicate non-government ownership. Firm types 59 thru 61 indicate federal, state and municipal government ownership, respectively. If the facility's owner is the government, it does not go bankrupt.

Firm financial characteristics were estimated based on an analysis of owners of active hazardous waste land disposal facilities with one or more of the following processes: surface impoundments; waste piles; land treatment units; or landfills. These facility types are not precisely the same as those simulated in the PCLTF Model, which includes injection wells and does not include waste piles.

The characteristics of the owner/operator for an existing facility are simulated by randomly drawing a firm type from the distribution of owners presented in Exhibit A-8. For example, 2.24 percent of the existing facilities are owned by firms with total net worth between $0 and $10 million and total assets between $2.5 and $2.9 million (firm type 5). Owner/operators of new facilities are assumed to be larger than owner/operators of existing facilities. For the purpose of modeling the owners of new facilities, the distribution of existing facilities owned by particular firms was changed so that no new facilities will have owners with less than $10 million in total assets. The probabilities for all firms of greater than $10 million in total assets were increased to correct for this change. The net worth and total

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[6] The simulation of bankruptcy is discussed in Section A.3.3, Financial Relationships.

EXHIBIT A-8

DISTRIBUTION OF FIRM CHARACTERISTICS

Firm Type	Prob for Existing Facilities	Prob for New Facilities	Net Worth (Millions)	Total Assets (Millions)	Type of Owner	Number of Facilities Owned
1	.0184	.0000	0.- 10.	0.0- 0.5	Private	1
2	.0281	.0000	0.- 10.	0.5- 1.0	Private	1
3	.0281	.0000	0.- 10.	1.0- 2.0	Private	1
4	.0105	.0000	0.- 10.	2.0- 2.4	Private	1
5	.0224	.0000	0.- 10.	2.4- 2.9	Private	1
6	.0416	.0000	0.- 10.	3.0- 5.0	Private	1
7	.0058	.0000	0.- 10.	3.0- 5.0	Private	1
8	.0058	.0000	0.- 10.	3.2- 5.0	Private	2
9	.0058	.0000	0.- 10.	3.0- 4.9	Private	3
10	.0261	.0000	0.- 10.	3.0- 3.0	Private	6
11	.0019	.0000	0.- 10.	5.1- 9.5	Private	1
12	.0252	.0312	0.- 10.	7.8- 7.8	Private	2
13	.0058	.0072	0.- 10.	10.2- 20.0	Private	1
14	.0068	.0085	0.- 10.	12.4- 12.8	Private	2
15	.0019	.0024	0.- 10.	21.2- 31.1	Private	1
16	.0058	.0072	0.- 10.	22.8- 22.8	Private	2
17	.0048	.0060	0.- 10.	75.8- 152.5	Private	1
			0.- 10.	146.2- 146.2	Private	5
18	.0010	.0000	10.- 100.	7.5- 7.5	Private	1
19	.0068	.0084	10.- 100.	18.0- 20.0	Private	1
20	.0019	.0024	10.- 100.	16.3- 16.3	Private	2
21	.0310	.0385	10.- 100.	20.0- 47.3	Private	1
22	.0116	.0144	10.- 100.	25.4- 39.8	Private	2
23	.0029	.0036	10.- 100.	44.7- 44.7	Private	3
24	.0058	.0072	10.- 100.	35.4- 35.4	Private	6
25	.0164	.0204	10.- 100.	51.1- 99.4	Private	1
26	.0058	.0072	10.- 100.	58.0- 96.2	Private	2
27	.0029	.0036	10.- 100.	84.7- 84.7	Private	3
28	.0068	.0085	10.- 100.	64.7- 64.7	Private	7
29	.0174	.0216	10.- 100.	107.3- 202.5	Private	2
30	.0010	.0012	100.- 1000.	11.5- 11.5	Private	1
31	.0425	.0528	100.- 1000.	100.3- 455.4	Private	1
32	.0271	.0337	100.- 1000.	151.1- 496.9	Private	1
33	.0232	.0288	100.- 1000.	150.5- 482.6	Private	2
34	.0029	.0036	100.- 1000.	367.4- 367.4	Private	3

EXHIBIT A-8 (continued)

DISTRIBUTION OF FIRM CHARACTERISTICS

Firm Type	Prob for Existing Facilities	Prob for New Facil-ities	Net Worth (Millions)	Total Assets (Millions)	Type of Owner	Number of Facilities Owned
35	.0232	.0288	100.- 1000.	502.6- 993.7	Private	1
36	.0135	.0168	100.- 1000.	526.3- 787.0	Private	2
37	.0087	.0108	100.- 1000.	661.7- 709.4	Private	2
38	.0039	.0049	100.- 1000.	710.3- 710.3	Private	3
39	.0251	.0312	100.- 1000.	1048.4- 3272.7	Private	4
40	.0145	.0180	100.- 1000.	1111.1- 2117.4	Private	2
41	.0039	.0049	100.- 1000.	1594.2- 1594.2	Private	3
42	.0048	.0060	100.- 1000.	1636.0- 1636.0	Private	4
43	.0087	.0108	100.- 1000.	1274.9- 1274.9	Private	5
44	.0097	.0121	100.- 1000.	3908.9- 3908.9	Private	9
45	.0155	.0193	100.- 1000.	1192.9- 1192.9	Private	10
46	.0010	.0012	1000.-20000.	450.0- 450.0	Private	16
47	.0280	.0348	1000.-20000.	1053.2-12417.0	Private	1
48	.0290	.0361	1000.-20000.	1555.0-16016.0	Private	1
49	.0290	.0361	1000.-20000.	1708.4-13729.4	Private	1
50	.0377	.0469	1000.-20000.	3033.4-21632.8	Private	2
51	.0348	.0433	1000.-20000.	2038.2-20614.0	Private	3
52	.0242	.0301	1000.-20000.	2001.4-21961.7	Private	4
53	.0522	.0649	1000.-20000.	2862.0-62288.6	Private	5
54	.0068	.0085	1000.-20000.	6060.9- 6060.9	Private	6
55	.0464	.0576	1000.-20000.	2048.0-27114.0	Private	7
56	.0193	.0240	1000.-20000.	6077.0-19432.0	Private	8
57	.0270	.0336	1000.-20000.	10616.0-41397.8	Private	10
58	.0155	.0192	1000.-20000.	21615.0-21615.0	Private	14
59	.0339	.0421	0.- 0.	0.0- 0.0	Federal	16
60	.0087	.0108	0.- 0.	0.0- 0.0	State	1
61	.0232	.0288	0.- 0.	0.0- 0.0	Municipal	1

Source: EPA estimates.

assets for the firm were simulated by drawing between the lower and upper bounds of the particular ranges as shown in Exhibit A-8.

Owner/Operator Stops Performing Routine Post-Closure Care and Monitoring

Post-closure care refers to the routine monitoring and care activities undertaken after a facility ceases accepting waste for land disposal and is closed. Each facility owner/operator is required to demonstrate financial assurance for performing post-closure care during the post-closure period (which is currently, by regulation, 30 years). However, in some cases, the owner/operator may stop performing this care before the end of the 30-year period because of insufficient funds. When the owner/operator stops performing the care must be simulated in order to estimate potential PCLTF expenditures because under certain assumptions, the PCLTF may pick up these costs and because if the owner/operator stops too soon, it may affect the facility's qualification for Fund coverage.

When an owner/operator stops performing post-closure care is a function of the type of financial assurance mechanism the owner/operator used. There are primarily three types of financial assurance mechanisms which the owner/operator may use to demonstrate his ability to meet the costs of post-closure care:[7]

- **Financial Ratio/Assets Tests**: used by large firms to demonstrate that they are financially able to cover the costs of post-closure care. The owner/operator pays for the necessary care actions during the post-closure period. If the owner/operator terminates business, there are no funds set aside specifically for the post-closure care activities. However, firms that are able to pass the financial ratio/assets tests are less likely than average to go out of business. Also, the costs of post-closure care would be a liability for the company when it went out of business. Therefore, a settlement to provide funds for the remaining post-closure care costs may be obtained by EPA if the owner/operator goes out of business before the end of the post-closure period.

- **Trust Fund/Insurance**: sets monies aside for use during the post-closure period. During the post-closure period, the available funds are used as needed. If the trust fund or insurance is insufficient to cover costs for the entire period, the responsibility to do so remains with the owner/operator. If the owner/operator goes out of business prior to when the trust fund/insurance runs out, then he is not available to cover these costs. If, however, the owner/operator is still in business, he may cover the costs of post-closure care until the end of the post-closure period or the time he goes out of business. If the owner/operator goes out of business after the trust fund/insurance runs out but before the end of the post-closure period, a settlement to provide funds for the remainder of the post-closure period may be obtained by EPA.

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[7] For the financial assurance regulations, see 40 CFR 264, Subpart H.

- **Letter of Credit/Surety Bond**: a separate party (e.g., a bank) agrees to guarantee that the owner/operator is able to cover the costs of post-closure care. During the post-closure period, the owner/operator pays the necessary care costs. However, if the owner/operator goes out of business, the guarantor covers the costs of post-closure care up to the limit of his guarantee.

To simulate the performance of these financial assurance mechanisms, the following estimates are required:

- the frequency with which firms in different net worth categories use each mechanism;
- the frequency with which each of the financial assurance mechanisms is used overall;
- the size of the settlement that EPA could expect when the firm goes out of business (expressed as a percentage of the remaining post-closure care costs for which the owner/operator is liable); and
- the expected duration of trust funds and insurance.

To estimate the frequency with which firms in various net worth categories use each mechanism, we started with data describing the frequency with which users of each mechanism were found to fall into each net worth category. Exhibit A-9 shows, for example, that 0.526 (or 52.6 percent) of those facilities using trust funds or insurance were found to have net worths of less than $10 million.

The second piece of data required is the overall frequency with which each financial assurance mechanism was found to be used. Using Mail Survey responses of approximately 225 land disposal facilities which reported the mechanism used for post-closure care, the following distribution was obtained:

- Financial Ratio/Corporate Guarantee: 63.3 percent;
- Trust Fund/Insurance: 12.8 percent;
- Surety Bond/Letter of Credit: 11.5 percent; and
- Other: 12.4 percent.

After dropping the "other" category, the resulting percentages for the first three categories are 72.2, 14.6, and 13.2, respectively.

EXHIBIT A-9

FREQUENCY DISTRIBUTIONS OF OWNER/OPERATOR NET WORTH BY FINANCIAL ASSURANCE MECHANISM USED

Financial Ratio/Assets Tests:

RANGE OF NET WORTH (MILLIONS OF $)	PROBABILITY
0.1 - 10.0	0.000
10.0 - 100.0	0.038
100.0 - 1000.0	0.308
1000.0 - 5000.0	0.654

Trust Fund/Insurance:

RANGE OF NET WORTH (MILLIONS OF $)	PROBABILITY
0.1 - 10.0	0.526
10.0 - 100.0	0.211
100.0 - 1000.0	0.105
1000.0 - 5000.0	0.158

Surety Bond/Letter of Credit:

RANGE OF NET WORTH (MILLIONS OF $)	PROBABILITY
0.1 - 10.0	0.526
10.0 - 100.0	0.211
100.0 - 1000.0	0.105
1000.0 - 5000.0	0.158

SOURCE: ICF Memorandum to EPA, "Financial Data on Firms Owning Land Disposal Facilities," July 29, 1983.

Finally, the distributions of financial assurance mechanisms for each net worth category were derived by applying Bayes' Theorem.[8] For example, for the category of net worth greater than $1,000 million, the probability of each mechanism was calculated as follows:

- Probability of Financial Ratio/Assets Tests = (0.654)(0.722)/(0.516)[9]=0.915;
- Probability of Trust Fund/Insurance = (0.158)(0.146)/(0.156) = 0.045; and
- Probability of Letter of Credit/Surety Bond = (0.158)(0.132)/(0.516) = 0.040.

The results of these computations are displayed in Exhibit A-10. Given the simulated net worth of each facility's owner, the financial assurance mechanism was simulated by drawing from the appropriate distribution shown in the exhibit.

Based on discussions with EPA, a settlement fraction of 0.10 was adopted for each of the financial assurance mechanisms. The expected duration of the trust funds (Exhibit A-11) was assumed to follow an exponential distribution and is based on discussions with EPA. There is considerable uncertainty surrounding the duration that post-closure care trust fund/insurance may be anticipated to last.

To simulate when an owner/operator stops performing post-closure care, the data described above were used as follows:

- using the distribution of financial assurance mechanisms corresponding to the owner/operator's net worth, assign a financial assurance mechanism to the facility;
- if financial assurance group 2 was assigned, simulate the duration of the trust fund;

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[8] Bayes Theorem is:

$$P(H/E) = \frac{P(E/H) \bullet P(H)}{P(E)}$$

where the variables E and H represent net worth and financial assurance mechanisms, respectively.

[9] The probability of a net worth greater than $1,000 million is derived from these financial assurance data as:

$$(0.722*0.654 + 0.158*0.146 + 0.158*0.132) = 0.516.$$

EXHIBIT A-10

DISTRIBUTIONS OF FINANCIAL ASSURANCE MECHANISMS BY NET WORTH CATEGORY[1]

Net Worth (millions 1982 dollars)	Financial Ratio/ Assets Tests	Trust Fund/ Insurance	Letter of Credit/ Surety Bond
less than 10	0.0	0.525	0.475
10-100	0.314	0.360	0.326
100-1000	0.884	0.060	0.056
greater than 1000	0.915	0.045	0.040

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[1] Rows sum to 1.0.

Source: See text.

EXHIBIT A-II

FREQUENCY DISTRIBUTION OF TRUST FUND DURATIONS

Duration (years)	Probability
21	0.011
22	0.007
23	0.012
24	0.020
25	0.032
26	0.053
27	0.088
28	0.145
29	0.238
30	0.394

SOURCE: Based on discussions with EPA.

- the owner/operator performs care for:
    - at a minimum, the duration of the trust fund/insurance (if he uses this mechanism), longer if he is still in business when the trust fund/insurance runs out;
    - the entire post-closure period (30 years) if he was not simulated to terminate business prior to this time; or
    - as long as he stays in business plus the settlement percentage times the remaining time in the post-closure period if he was simulated to terminate business prior to the end of the post-closure period.

This procedure simulates the length of time the owner/operator is expected to be able to cover post-closure care costs as currently required by regulation. This estimate is made for each facility when it is first considered by the Model, i.e., before releases and response actions are simulated. In the majority of cases, this estimate for the facility remains unchanged over time. However, in some cases, a situation may arise which results in the owner/operator going bankrupt before the time simulated here. In these cases, the new bankruptcy date is used to adjust the estimate of when the owner/operator stops paying for post-closure care. The method used to simulate these special case bankruptcies is described in Section A.3.3, Financial Relationships.

End of Post-Closure Care Period

As described above, the owner/operator's responsibility for covering post-closure care costs only extends through the post-closure period. We determined the end of the post-closure period by adding 30 years to the closure year. The 30-year post-closure period may be adjusted on a case-by-case basis. For modeling purposes, when a non-routine monitoring or response action is ongoing at the end of the 30-year period, the post-closure period is extended until the action is completed.

A.2.2.2 Facility Attributes

This section describes the facility-level attributes simulated in the PCLTF Simulation Model. Each attribute is described in terms of its role in the Model, the data analysis performed for estimating it, and the procedure used to simulate it in the Model. Exhibit A-12 summarizes the attributes and displays the values each attribute can have and the bases for the facility-level estimates of the attributes. For example, the facility location is defined in terms of the state, county, zip code, and groundwater region in which the facility is simulated to be located. The simulation of the location is based on the observed distribution of existing facilities throughout the country.

EXHIBIT A-12

ATTRIBUTES SIMULATED AT THE FACILITY LEVEL

Facility-Level Attribute	Value of Attribute	Basis for Simulation
Location	State; county; zip code; groundwater region.	Distribution of existing facility locations.
Disposal Processes: Size and Design	Size in acres; prototype design.[1]	Distribution of sizes and designs of existing facilities; expected distributions for new facilities.
Potential Releases and Associated Distance to Off-Site Detection Location	Year after facility opening in which release is expected to occur; distance to off-site detection location (in feet).	Release data; facility location; process design.
Detected Releases	True or false for each release type.	Potential releases; monitoring actions.
Status of Monitoring, Response, and and Post-Closure Actions	Year action began; duration of action; cost of action.	Detected releases; RCRA policy; action data.
Status of Claims	Cost of claims brought.	Detected releases; location; population which may potentially become exposed; claim data.
Population Which May Potentially Become Exposed to Hazardous Waste Constituents Due to an Off-site Release	Number of people.	Distribution of groundwater and surface water use near disposal facilities; number of people drinking surface water and groundwater supplied near the facility location.

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[1] There are seven prototype designs incorporated into the Model. See Appendix B.

Of note is that some simulated attributes form the basis for simulating other attributes. For example, facility location and process design serve as the bases for simulating potential releases. Furthermore, potential releases form the basis (along with monitoring actions) for simulating detected releases. Detected releases are important for simulating the actions (monitoring and response) which must be taken at the facility. Clearly, the attributes simulated at the facility level are highly interrelated, and many inter-relationships can be identified from Exhibit A-12. Each attribute is described separately.

Location

The location of each facility is defined in terms of the following:

- County;
- State;
- Zip code (5 digit); and
- Groundwater region.

Each of these location definitions is used within the Model to reference a data base or a simulated value. For example, the county location is used to reference data on population density. The state location is used to reference the simulated state legal liability regime.[10] Exhibit A-13 summarizes the uses of each location definition.

Data from the Part A Data Base were used to simulate the locations of both existing and new facilities. For the 2,600 facilities in the Model's facility data base, the state was identified as the first two characters of the facility identification number (which corresponds to the standard U.S. Post Office state abbreviation) reported in the Part A Data Base. The county identification code was also requested in the Part A Data Base and in most cases, it was reported. However, 101 county codes were missing, and were filled in by using the reported facility address (city and street) to identify the appropriate county from standard state and county maps. Additionally, errors in reported county codes (i.e., county codes which do not exist in the reported state) were identified and corrected.

The facility zip code was reported in the Part A data in nearly all cases. Missing zip codes were identified using the reported facility address (city and street) and the standard post office zip code reference book. The groundwater region was identified using the facility latitude and longitude reported in the Part A data. Missing and invalid values were filled in using the reported facility address.[11]

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[10] Legal liability regimes are used to simulate the legal validity of claims. These regimes may vary from state to state due to differences in state statutes and state common law. The legal liability regimes are discussed in section A.3.6, Legal Validity of Claims.

[11] Invalid latitude and longitude values were identified as those outside the lower 48 states.

EXHIBIT A-13

SUMMARY OF USE OF EACH LOCATION DEFINITION

Location Definition	Used to Identify
County	Population density; median housing value; housing density; mean farm value; percentage of area used as farmland.[1]
State	Simulated state legal liability regime; simulated state coverage regime;[2] hazardous waste market region.[3]
Zip Code (5 digit)	Number of people who drink water supplied from within the zip code.[4]
Groundwater Region	Release matrix for simulating releases at the facility level.[5]

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[1] Data obtained from Bureau of the Census, The County and City Data Book, 1977, U.S. Department of Commerce.

[2] State legal liability regimes are used to simulate the legal validity of claims; see section A.3.6, Legal Validity of Claims. State coverage regimes define the funding available at the state level to cover costs arising at land disposal facilities; see section A.2.6, Funding Sources.

[3] Each state is assigned to one of four regional hazardous waste disposal markets. These markets are used to balance the demand for and supply of hazardous waste disposal capacity; see section A.3.1, Economic Relationships.

[4] Data obtained from the Drinking Water Survey, Office of Drinking Water, U.S. Environmental Protection Agency, 1981.

[5] The lower 48 states are divided into 12 groundwater regions. These regions are used in the Release Simulation Model (see Appendix B) and to aggregate the release results into release matrices; see section A.2.3, Modeling of Releases.

After this data gathering was performed, all the necessary location parameters were available for all 2,600 facilities included in the facility data base. These data formed the pool of facilities for simulating the population of existing facilities (see section A.2.1, Facility Population). If a facility was simulated to be part of the existing facility population, its location identified from the Part A Data (and from the corrections and additions made) was used.

The locations of new facilities were simulated by drawing randomly from the locations of existing facilities, as indicated in the Part A Data. The Model is designed to allow the user to specify the extent to which new facilities are opened at "better" locations than existing facilities. A location is defined to be better if it has: (1) fewer people using the groundwater or surface water near the facility; (2) lower property values near the facility; and/or (3) a lower likelihood of release. A location that is better along these dimensions is preferred because it is less likely to lead to costs and damages.

The first two location characteristics (people using water and property value) are modeled for new facilities by modifying the manner in which new facility locations are drawn. Rather than draw from the full range of existing facility locations, the user can define a portion of the range that may be used. For example, the user may specify that only the top one-third of the existing facility locations (in terms of ground and surface water use) may be selected as new facility locations. This is accomplished by ranking the existing facility locations according to the desired characteristics (lowest to highest) and only drawing from the top one-third of the ranked locations. If two characteristics are specified (both water use and property value), then the allowable set of locations for new facilities may be limited further. In current simulations, only the top one-third of existing locations in terms of ground and surface water use were specified as allowable candidates for new facility locations. No limitations on property value were used.

The manner in which releases at new facilities were limited is discused in section A.2.3, Modeling of Releases. The method of limiting releases at new facilities is independent of the method of limiting water use and property value described here.

Disposal Processes

Each facility is simulated to have one or more of the following four processes:[12]

- surface impoundment (storage, treatment, disposal);
- landfill;
- land treatment; and
- injection well.

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[12] Facilities may also have other hazardous waste management processes, such as storage in containers and treatment in tanks. However, these processes are not simulated in the PCLTF Simulation Model.

The processes at each facility must be simulated because releases occur at individual processes, and the sizes of the processes influence the costs of monitoring, response, and post-closure care actions. At each facility, the presence, size, and design of each process is simulated as described below.

Processes Present. Facilities simulated to be part of the facility population (either as existing facilities or new facilities generated within the Model) will have one or more of the four disposal processes. Using the most recent data describing the population of existing land disposal facilities,[13] a frequency distribution was developed to describe the chance of each process being used at each facility. The data analysis performed to estimate this distribution is described in section A.2.1, Facility Population. The estimated distribution is shown in Exhibit A-3 in that section. The disposal processes present at each facility are simulated by drawing from this distribution. No distinction is made between existing and new facilities.

Process Size. The sizes of the disposal processes present at each facility are expressed in terms of their surface area and are measured in acres. These sizes are used to estimate the costs of monitoring, response, and post-closure care actions taken at the facility.[14]

Sizes for processes at existing facilities were simulated based on frequency distributions developed from the Mail Survey Data. Exhibit A-14 displays the estimated distributions. For surface impoundments, the total area of all surface impoundments at each of 135 facilities was used to estimate the distribution. For example, Exhibit A-14 shows that 45.1 percent of the facilities with surface impoundments have a total surface impoundment area of between 0.1 and 1.0 acres. The landfill size distribution, based on 44 Mail Survey responses, was estimated by multiplying the facility's reported average cell size by the total number of cells reported. The size distribution for land treatment processes, based on only 30 values, was developed directly from the Mail Survey responses, which reported the surface area in acres.

The sizes of processes at existing facilities were simulated by drawing from these distributions. First, the size range was determined by drawing a random number and comparing it to its probabilities of falling into the various possible size ranges. Then, a size was drawn from a uniform disribution bounded by the end points of the chosen size range.

No data were available upon which to estimate sizes of processes at new facilities. We assumed that new landfills, surface impoundments and land treatment processes would be larger than existing ones and estimated the size distributions of these processes by dropping the smallest size categories in the distributions for existing facilities. These assumed distributions are

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[13] The data sources used were the Part A Data, the Telephone Verification Survey Data, and the Mail Survey Data.

[14] See section A.2.4, Actions, for a description of the costs of actions.

EXHIBIT A-14

FREQUENCY DISTRIBUTIONS OF PROCESS SIZES FOR EXISTING FACILITIES

Surface Impoundments:[1] mean = 3.35 acres; median = 0.83 acres

Size Range (acres)	Probability
0.01-0.1	0.143
0.1-1.0	0.451
1.0-3.0	0.181
3.0-7.0	0.128
7.0-9.0	0.007
9.0-10.0	0.030
10.0-26.0	0.045
26.0-100.0	0.015
	1.000

Landfills:[2] mean = 46.0 acres; median = 9.2 acres

Size Range (acres)	Probability
0.01-0.50	0.18
0.5-4.1	0.24
4.1-6.8	0.02
6.8-14.7	0.20
14.7-27.5	0.11
27.5-142.0	0.18
142.0-468.0	0.07
	1.00

Land Treatment:[3] mean = 36.5 acres; median = 10.0 acres

Size Range (acres)	Probability
0.1-1.0	0.100
1.0-7.0	0.300
7.0-10.0	0.100
10.0-13.0	0.033
13.0-15.0	0.067
15.0-60.0	0.300
60.0-100.0	0.033
100.0-188.0	0.034
188.0-680.0	0.033
	1.000

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[1] Based on 135 observations from the Mail Survey.

[2] Based on 44 observations from the Mail Survey.

[3] Based on 30 observations from the Mail Survey.

displayed in Exhibit A-15. The sizes of processes at new facilities were drawn from these distributions.

Process Design. A process design refers to the type of cap and liner the process employs and whether it has a leachate collection system. The design of each process is used to simulate releases at the facility level.

The following seven prototypes designs were developed:[15]

- **Design 1**: unlined surface impoundment with a clay cap following closure;
- **Design 2**: clay-lined surface impoundment with a clay cap following closure;
- **Design 3**: synthetic membrane and clay cap, synthetic membrane liner, leachate collection system, bedding material under synthetic membrane liner;
- **Design 4**: synthetic membrane and clay cap, two synthetic liners, leak detection, and leachate collection system;
- **Design 5**: two synthetic membranes and clay cap, synthetic membrane and clay outer liner, clay inner liner, and leachate collection system;
- **Design 6**: unlined landfill with a clay cap following closure; and
- **Design 7**: clay-lined landfill with a clay cap following closure.

Injection wells and land treatment processes were not assigned a design because releases at injection wells and land treatment processes were not simulated. Because releases may in fact occur at these processes, the Model may underestimate total releases. The responses to the Mail Survey were used to estimate the frequency with which these designs occur at existing surface impoundments and existing landfills.

The design data reported in the Mail Survey for surface impoundments and landfills were limited primarily to the liner materials used. Exhibit A-16 displays the data obtained and the prototype designs assumed to be representative of the Mail Survey responses. For processes with a single synthetic membrane liner, design 3 was used. For processes with either two synthetic membrane liners or one synthetic membrane liner and one clay liner, design types 4 and 5, respectively, were used. Using the observations

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[15] The prototype designs are defined in detail in Appendix B, Release Simulation Model.

EXHIBIT A-15

FREQUENCY DISTRIBUTIONS OF PROCESS SIZES FOR NEW FACILITIES

Surface Impoundments:[1]

Size Range (acres)	Probability
0.01-0.1	0.000
0.1-1.0	0.526
1.0-3.0	0.211
3.0-7.0	0.149
7.0-9.0	0.008
9.0-10.0	0.035
10.0-26.0	0.053
26.0-100.0	0.018
	1.00

Landfills:[2]

Size Range (acres)	Probability
0.01-0.50	0.00
0.5-4.1	0.29
4.1-6.8	0.03
6.8-14.7	0.24
14.7-27.5	0.13
27.5-142.0	0.22
142.0-468	0.09
	1.00

Land Treatment:[3]

Size Range (acres)	Probability
0.1-1.0	0.000
1.0-7.0	0.333
7.0-10.0	0.111
10.0-13.0	0.037
13.0-15.0	0.074
15.0-60.0	0.333
60.0-100.0	0.037
100.0-188.0	0.038
188.0-680.0	0.037
	1.000

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[1] Estimated by eliminating smallest size category from distribution of existing surface impoundment sizes.

[2] Estimated by eliminating smallest size category from distribution of existing landfill sizes.

[3] Estimated by eliminating smallest size category from distribution of existing land treatment sizes.

EXHIBIT A-16

DESIGN TYPES

Surface Impoundments

Liner Material(s)	Assumed Design Type[1]	Surface Impoundment Responses	(Percent)
Unlined	1	126	39.2
Clay-lined	2	82	25.5
Synthetic membrane	3	66	20.6
Two synthetic membranes	4	14	4.4
Synthetic membrane and clay	5	5	1.6
Other	2	28	8.7
		321	100.0

Landfills

Liner Material(s)	Assumed Design Type[1]	Landfill Responses	(Percent)
Unlined	6	37	47.4
Clay-lined	7	31	39.7
Synthetic membrane	3	3	3.8
Two synthetic membranes	4	1	1.3
Synthetic membrane and clay	5	0	0.0
Other	7	6	7.8
		78	100.0

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[1] Refers to prototype designs, see text.

reported in Exhibit A-16, we assigned the following frequencies to the designs at existing surface impoundments:

- Design 1: 0.392;
- Design 2: 0.342;
- Design 3: 0.206;
- Design 4: 0.044;
- Design 5: 0.016;
- Design 6: 0.0; and
- Design 7: 0.0.

The observations reported in Exhibit A-16 for landfills were similarly used to estimate a frequency distribution of designs, with the following results:

- Design 1: 0.0;
- Design 2: 0.0;
- Design 3: 0.038;
- Design 4: 0.013;
- Design 5: 0.0;
- Design 6: 0.474; and
- Design 7: 0.475.

The designs at existing landfills and surface impoundments were simulated by drawing from these distributions.

No data were available for estimating design frequencies for new landfills and surface impoundments. Prototype designs 3, 4 and 5 each meet existing EPA design requirements for new facilities. Based on discussions with EPA, we assumed that the frequencies of designs at new facilities would be:

- Design 3: 0.340;
- Design 4: 0.495; and
- Design 5: 0.165.

The use of prototype designs and the lack of data upon which to characterize the designs of new facility processes are clearly shortcomings of the data currently used to run the Model. However, the results of the Release Simulation Model indicated that the release potential is similar for designs 3, 4 and 5. Consequently, the Model results are not sensitive to the assumed distribution of new facility designs (among designs 3, 4 and 5).

Releases: Potential and Detected

The purpose of this section is to identify the release information maintained at the facility level. This information can be divided into two parts:

- descriptors of potential releases; and
- identification of releases that have been detected.

This information is used for a variety of purposes within the Model. In particular, the information about detected releases identifies (along with user-supplied action policies) the actions required at the facility. Not discussed here are:

- the definitions of the seven release types modeled (see section A.2.3, Modeling of Releases);
- the manner in which releases are simulated (see section A.2.3, Modeling of Releases and Appendix B, Release Simulation Model);
- the effect that response actions have on releases (see section A.3.5, Effect of Response Actions on Releases); and
- the manner in which monitoring and response actions detect releases (see section A.2.4, Actions).

Potential Releases. Potential releases are the Model's estimate of those releases expected to occur at the facility in the future. They are determined by random draws from the release matrices provided by the Release Simulation Model (see Section A.2.3 and Appendix B). The Model makes this estimate when the facility is simulated to open, and then revises it as needed when response actions are simulated to be taken which influence the potential for future releases.

Potential releases at a facility are identified by the time they are expected to occur and by their location. For example, the timing of one release type may be identified as 30 years after opening, and the timing of a second release type may be 50 years after opening. If a release is not anticipated to occur at the facility, its potential time is set to the value 999.

The locations of releases can be either on site or off site. On-site releases are assumed to be detected at the on-site monitoring wells. Off-site releases are assumed to be detected at the potable well or naturally occurring body of surface water closest to the facility. The distance to this off-site point of detection (in feet) is simulated in the Release Simulation Model and maintained at the facility level as a descriptor of potential releases.

Detected Releases. Detected releases are those releases that have been simulated to occur and have been simulated to be detected. When the facility opens, no releases have been detected. The Model updates its identification of detected releases as releases are simulated to be detected. A release remains in the detected state until all the facility's potential releases have been detected and cleaned up. After the facility has been cleaned up, the facility is returned to having no detected releases.

Status of Monitoring, Response, and Post-Closure Care Actions

Actions are undertaken at a facility whenever a release is detected and at the beginning of the post-closure period. Several facility-level parameters are maintained for each action in order to describe its status over time. Below, we present each of these parameters. A detailed description of the actions and the methods used to estimate their costs is presented in Section A.2.4, Actions.

The statuses of monitoring, response, and post-closure care actions are summarized using the following parameters:

- **Year action began**. The year after facility closure in which the action began is recorded for each action. If the action was never started or if the action was stopped, this parameter is set to 999 or -999, respectively.

- **Capital investment**. Each action has a capital investment requirement. This includes planning for construction and installing capital equipment (i.e., monitoring wells and wells used for fluid removal and treatment). For each action, an indicator is maintained as to whether the capital investment required for that action has been completed. This indicator is important because monitoring actions cannot detect releases until the capital investment is completed. In addition, capital investment occurs only once for each action at each facility. When an action is undertaken for a second time, capital investment is not required if this investment was previously performed.

- **Action Completion**. An indicator is used to denote if an action has been performed for its full duration (i.e., has been completed). (See Section A.2.4, Actions, for a description of the durations of response actions.)

- **Annual Costs**. The annual capital cost and annual operation and maintenance (O&M) cost is maintained at the facility level for each action.[16] The annual capital cost is incurred while capital investment is being performed. The O&M costs are incurred for the duration of the action.

The above parameters are maintained for all actions. In addition, the following information is maintained on response actions in order to simulate their effect on releases:

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[16] The estimates for both capital and O&M costs are presented in section A.2.4, Actions.

- **Fraction of response action completed.** When a response action ends, its actual duration as a fraction of its required duration is recorded. This fraction is used to assess whether the response action is effective in preventing or delaying future releases and in determining the required duration of the response action if it is undertaken again.

- **Required duration.** The duration for which a response action must be performed may vary at the facility level. When a response action is taken at a facility for the first time, its required duration is assumed to be the period defined for the action (see section A.2.4, Actions, for a description of the durations of response actions). However, if a response action is stopped before completion and subsequently restarted, its new required duration is simulated to be less than its original duration. In this manner, "credit" is given for having performed the action for some period of time. The amount of credit given is a function of the fraction of the action completed (the larger the portion completed, the greater the credit). Because the required duration of the response action varies depending on past actions at the facility, the required duration is maintained at the facility level.

Status of Third-Party Claims at the Facility

Claims are brought by third parties who believe they have been harmed by an off-site release at a facility. The four claim types are:

- **Personal Injury.** Medical costs, lost time due to illness, lost time due to mortality, and medical monitoring costs comprise personal injury claims.

- **Real Property.** Real property claims reflect a reduction in the value of housing and farmland near the location of an off-site release.

- **Economic Loss.** The capital cost of replacing a contaminated source of drinking water was used to approximate economic loss claims.

- **Natural Resource Damage Claims.** The cost of restoring small areas of contaminated surface water, the value of lost recreation for one year, and the commercial value of potential fish kills comprise the estimate of natural resource damage.

The methods and data used to calculate these claims are described in section A.2.5, Claims. This section describes the information on third-party claims which is maintained at the facility level, and is divided into two parts: cost information, and the uses of ground and surface water near the facility.

Cost Information. The following three cost parameters are recorded at the facility level for each of the four claim types:

- Generated Claims: the claims (in 1982 dollars) that have been brought by third parties as the result of off-site releases.

- Legally Valid Claims: that portion of generated claims which is simulated to be legally valid under the legal liability regime of the state in which the claims were brought.[17] The legally valid claims can be any fraction of the generated claims.

- Covered Claims: that portion of the legally valid claims for which compensation is provided. If no funding source is available to pay for a legally valid claim, the claimant will not be compensated and the covered claims will be zero.

This claims information is summarized during a Model run to identify the overall fraction of generated claims which are simulated to be legally valid, and the overall fraction of legally valid claims which are covered. For example, in Simulation 1, approximately 18 percent of the total personal injury claims were simulated not to be legally valid. Of the remaining legally valid claims, funding sources were simulated to be available for nearly 98 percent of the total claims.

The information on covered claims is also used at the facility level to avoid double counting of claims costs. Two different off-site releases can lead to third-party claims. When release type 5 (detectable concentration of constituents off site) occurs, claims are estimated. If release type 6 subsequently occurs (toxic concentrations of constituents off-site), claims are estimated again. However, both releases cause the same type of harms.[18] Therefore, to avoid double counting, the generated claims for release type 6 are adjusted by subtracting the previously covered claims from release type 5. Of note is the assumption that only covered claims need to be subtracted, and not generated claims. This means that if a claimant was not compensated for harms caused by release type 5, he would be able to make another claim if release type 6 occurred subsequently.

Uses of Ground and Surface Water Near the Facility. To estimate personal injury claims and economic loss claims, the uses of ground and surface water near the facility must be simulated. Although a variety of uses may be present, this analysis focuses on the number of people drinking the water which originates from near the facility. This estimate is maintained at the facility level and is used as a proxy for the number of people who consider themselves harmed by the off-site release. Because there may be other uses of the ground and surface water near the facility (e.g., industrial and agricultural uses) which may be affected by the release, the estimates of these claims may be biased downward.

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[17] The method used for simulating the legal validity of claims is described in section A.3.6.

[18] Release type 6, however, causes larger claims for real property damage.

Data describing the number of people drinking water originating from nearby hazardous waste disposal facilities (referred to here as the drinking water population) have not been assembled. Consequently, no single authoritative data base was available upon which to estimate or simulate the drinking water population at the facility level. To overcome this deficiency, two EPA data sources were used jointly to simulate the necessary values: the drinking water survey and the site visit survey. The following discussion first identifies the data obtained from each survey. Then, the procedure used to establish a relationship between the two data sources is described. Finally, the method used to simulate the drinking water population using the two data sources and the estimated relationship between them is presented.

The drinking water survey is compiled annually by EPA's Office of Drinking Water. Each year, all suppliers of drinking water must report a series of information items to the appropriate state authorities,[19] who then forward the information to the federal EPA. Over 95 percent of all drinking water use is reportedly included in this annual survey.

Considerable information is collected in the survey from each water supply plant in the U.S. A water supply plant is the location where the drinking water is treated (if necessary) and fed into the water distribution system. Nearly all water treatment plants are adjacent to or very near the source of the water used (i.e., the lake, stream, or wells from which the water is obtained).[20] Consequently, the data reported by the water supply plants describing the number of people they serve were used in the PCLTF Simulation Model as estimates of the number of people using water that originates from the location of the water supply plant.

The most detailed data available to describe the location of the water supply plants were their 5-digit zip codes. Because more than one water supply plant may exist in a single 5-digit zip code, the data were aggregated by zip code. The resulting data base describes the total number of people who are served by water originating from each zip code. The people who are reported as being served by the plant may not necessarily reside in the zip code.

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[19] In states without authorized drinking water programs, the information is reported to the appropriate regional EPA offices.

[20] In the western United States, supply plants are occasionally far from water sources. For example, water is pumped from Northern California to supply plants in the southern portion of the state.

The information on people served was reported by each water supply plant in one of four water source categories:

1. surface water;
2. groundwater;
3. purchased surface water (i.e., surface water purchased by the water supply plant); and
4. purchased groundwater (i.e., groundwater purchased by the water supply plant).

If a single plant used more than one water source (for example, both surface water and groundwater), the information was reported by the plant in the category ranked highest on the above list (in this example, surface water). However, because the data were aggregated within 5-digit zip codes for use in the Model, a zip code could have values reported for more than one category (because there can be more than one water supply plant in a zip code).

These data from the drinking water survey provide a comprehensive picture of U.S. sources of drinking water. However, they do not identify the extent to which water supplies may be influenced by releases from hazardous waste land disposal facilities. In particular, 5-digit zip codes may be large (especially in sparsely populated areas) and it is not realistic to assume that a release from a hazardous waste land disposal facility would necessarily harm the entire water supplies in the facility's zip code. A method was required to assess the likelihood that releases would affect water supplies. To address this need, the data collected by EPA in its site visit survey of 1982/1983 were used.

EPA identified 109 facilities for site visits. Of these, data were reported on 63. A variety of data were collected in these visits, including information on the proximity and use of ground and surface water. For groundwater, data were collected on whether wells for the following uses were near the facility:

- single residential: wells owned and used by residents;
- municipal: wells owned by a municipality and used to supply water to the surrounding population; and
- other: wells used for agriculture and industrial uses.

Information on the distance to groundwater wells was also reported in the site visit survey. For each site, the closest well was identified as either within 1 mile or farther away than 1 mile. However, much of these data were missing or inconsistent and consequently were not used. Of those distances reported, 65 percent were within 1 mile, and 35 percent exceeded 1 mile.

For surface water, data were collected on whether the following uses of surface water were within 1,000 feet, 1 mile, 5 miles or greater than 5 miles of the facility:

- drinking;
- recreation (e.g., swimming and boating); and
- commercial or industrial.

The data obtained from the site visits are summarized in Exhibit A-17. For example, 26 of the 63 facilities reported single residential wells near the facility. Similarly, 8 of the 63 facilities reported surface water within 1,000 feet being used for drinking.

These site visit data alone are not sufficient to estimate the drinking water population required for claims estimates. The data are available for only a small number of facilities, and they provide no indication of the number of people whose drinking water may be affected by a release. Consequently, a method was developed to combine the site visit survey data with the drinking water survey data to provide a basis for simulating the drinking water population.

To combine the two data sets, the following four steps were performed:

- **Step 1**: create mutually exclusive categories of groundwater use and surface water use based on the site visit survey data. These categories, and the number falling into each, are:

  -- Groundwater Use Well Type:
  1. Single residential drinking: 22
  2. Municipal drinking: 8
  3. Other uses only (no drinking): 9
  4. Single residential and municipal drinking: 4
  5. No wells: 20

  -- Surface Water Use:
  1. Water present but not used: 6
  2. Drinking: 2
  3. Recreation: 29
  4. Other uses only: 9
  5. Drinking and recreation: 14
  6. No surface water present: 3

- **Step 2**: Create mutually exclusive categories of responses to the drinking water survey. These categories are:

  -- Groundwater only (people served by groundwater or purchased groundwater)

  -- Surface water only (people served by surface water or purchased surface water)

EXHIBIT A-17

SUMMARY OF SITE VISIT SURVEY DATA ON GROUNDWATER AND SURFACE WATER USE

Groundwater Use[1]

Use	Number Reporting
Single Residential	26
Municipal	12
Other	9
No Wells Reported	20
	67

Surface Water Use[1]

	Distance to Closest Naturally Occurring Body of Surface Water				
USE	1,000 feet	1 mile	5 miles	5 miles	Total
Drinking	8	7	1	0	16
Recreation	20	16	7	0	43
Commercial/ Industrial	17	11	5	0	33
Not Used	2	2	2	3	9
TOTAL	47	36	15	3	101

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[1] More than one use can be reported by a single facility. Consequently, totals exceed the 63 responses reviewed.

Source: See text.

  - Both ground and surface water
  - No response (no water supply plant in the zip code)

- **Step 3**: For each response to the site survey, identify the facility's 5-digit zip code. Using this zip code, identify the category of response from the drinking water survey. Of the 63 facilities in the site survey: 22 were in zip codes with groundwater only; 5 were in surface water only; 20 were in both ground and surface water; and 16 were in zip codes that had no response on the drinking water survey.

- **Step 4**: Using the results of steps 1 and 3, create the following two sets of tables:

  - **Well Types**: given the drinking water survey response category, identify the probability of having each of the five possible groundwater uses. Because distance data are not available, assume these probabilities reflect usage patterns between 1,000 feet and 5 miles. Assume no usage within 1,000 feet and assume that usage at distances exceeding 5 miles will not be affected. This set of tables is displayed in Exhibit A-18.

  - **Surface Water Use**: given the drinking water survey response category and the site survey distance category, identify the probability of having each of the six possible surface water uses. This set of tables is displayed in Exhibit A-19.

The tables created in step 4 are a summary of the relationship between the drinking water survey data and the site visit survey data. For example, Exhibit A-18 shows that of those facilities in the groundwater category (of the drinking water survey), 42 percent had well type 1 (single residential), 32 percent had well type 2, 11 percent had well type 3, and 15 percent had well type 4. These probabilities were assumed to apply to distance categories 2 and 3 (1,000 feet to 5 miles). It was further assumed that there would be no wells within 1,000 feet (consequently, there is a 100 percent chance of well type 5, no wells, for this distance) and that wells in excess of 5 miles would not be affected by releases.

Exhibit A-19 shows a similar relationship for surface water use. However, distance information was available in this case. For example, of those facilities in the groundwater category and in distance category 1, 83 percent had surface water use 3 (recreational use) and 17 percent had surface water use 4 (other uses only).

These two exhibits display considerable consistency between the two data sets. For example, in Exhibit A-18, there are no entries for groundwater drinking (well types 2 and 5) in the table for surface water responses to the

EXHIBIT A-18

FREQUENCY DISTRIBUTIONS OF WELL TYPES[1]* BY DRINKING WATER SURVEY RESPONSE AND DISTANCE[2] TO OFF-SITE POINT OF DETECTION

Response to Drinking Water Survey **Probability of Well Type by Distance**

Groundwater[3]

		Distance to Facility			
		1	2	3	4
Well type	1	0.000	0.420	0.420	0.000
	2	0.000	0.320	0.320	0.000
	3	0.000	0.110	0.110	0.000
	4	0.000	0.150	0.150	0.000
	5	1.000	0.000	0.000	1.000

Surface Water[4]

		Distance to Facility			
		1	2	3	4
Well type	1	0.000	0.500	0.500	0.000
	2	0.000	0.000	0.000	0.000
	3	0.000	0.500	0.500	0.000
	4	0.000	0.000	0.000	0.000
	5	1.000	0.000	0.000	1.000

Both Groundwater and Surface Water[5]

		Distance to Facility			
		1	2	3	4
Well type	1	0.000	0.720	0.720	0.000
	2	0.000	0.070	0.070	0.000
	3	0.000	0.140	0.140	0.000
	4	0.000	0.070	0.070	0.000
	5	1.000	0.000	0.000	1.000

No Response[6]

		Distance to Facility			
		1	2	3	4
Well type	1	0.000	0.290	0.290	0.000
	2	0.000	0.140	0.140	0.000
	3	0.000	0.570	0.480	0.000
	4	0.000	0.000	0.000	0.000
	5	1.000	0.000	0.000	1.000

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* Footnotes on following page.

FOOTNOTES TO EXHIBIT A-18

[1] See text for definition of well types.

[2] Distances are defined as follows:
    1. less than 1,000 feet
    2. 1,000 feet to 5,280 feet
    3. 5,280 feet to 26,400 feet
    4. greater than 26,400 feet

[3] Based on 22 observations from the site survey which also had a drinking water supply survey response.

[4] Based on five observations from the site survey which also had a drinking water supply survey response.

[5] Based on 20 observations from the site survey which also had a drinking water supply survey response.

[6] Based on 16 observations from the site survey which did not have a drinking water supply survey response.

Source: See text.

EXHIBIT A-19

FREQUENCY DISTRIBUTIONS OF SURFACE WATER USE[1]* BY DRINKING WATER SURVEY RESPONSE AND DISTANCE[2]

Response to Drinking Water Survey **Probability of Surface Water Use By Distance**

Groundwater[3]

		Distance to Facility			
		1	2	3	4
Surface Water Use	1	0.000	0.126	0.168	1.000
	2	0.000	0.000	0.000	0.000
	3	0.830	0.500	0.661	0.000
	4	0.170	0.000	0.168	0.000
	5	0.000	0.374	0.000	0.000
	6	0.000	0.000	0.000	0.000

Surface Water[4]

		Distance to Facility			
		1	2	3	4
Surface Water Use	1	0.000	0.000	0.000	0.000
	2	0.000	0.000	0.000	0.000
	3	0.333	0.000	0.500	0.000
	4	0.000	0.000	0.500	0.000
	5	0.667	0.000	0.000	0.000
	6	0.000	1.000	0.000	1.000

Both Groundwater and Surface Water[5]

		Distance to Facility			
		1	2	3	4
Surface Water Use	1	0.241	0.000	0.000	0.000
	2	0.120	0.000	1.000	0.000
	3	0.482	0.000	0.000	0.000
	4	0.120	0.000	0.000	0.000
	5	0.037	1.000	0.000	0.000
	6	0.000	0.000	0.000	1.000

No Response[6]

		Distance to Facility			
		1	2	3	4
Surface Water Use	1	0.000	0.167	1.000	1.000
	2	0.000	0.000	0.000	0.000
	3	0.375	0.333	0.000	0.000
	4	0.375	0.333	0.000	0.000
	5	0.250	0.167	0.000	0.000
	6	0.000	0.000	0.000	0.000

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* Footnotes on following page.

FOOTNOTES TO EXHIBIT A-19

[1] See text for definition of surface water uses.

[2] Distances grouped as follows:

1. less than 1,000 feet
2. 1,000 feet to 5,280 feet
3. 5,280 feet to 26,400 feet
4. greater than 26,400 feet

[3] Based on 22 observations from the site survey which also had a drinking water supply survey response.

[4] Based on five observations from site survey which also had a drinking water supply survey response.

[5] Based on 20 observations from the site survey which also had a drinking water supply survey response.

[6] Based on 16 observations from the site survey which also had a drinking water supply survey response.

Source: See text.

drinking water survey. Some inconsistencies do exist. For example, in Exhibit A-19, the first table showing the groundwater responses to the drinking water survey shows an entry of 0.374 in use type 5 (drinking and recreation) in distance category 2 (1,000 feet to 1 mile). However, no surface water was reported used for drinking in this zip code (as is evidenced by it being in the groundwater category). Consequently, these responses are inconsistent.

The inconsistencies may be due to a variety of factors, including:

- The drinking water usage reported in the site survey may not meet the definition of water supply used in the drinking water survey (e.g., the water supply may not be used year round).
- The responses to the drinking water survey are hierarchical. As discussed above, if both surface and groundwater are supplied by a plant, the plant's report is placed under the surface water category.

The inconsistencies reflect the fact that using the drinking water survey data may result in an underestimate of the drinking water population because some water uses near facilities may not be reported.

The tables displayed in Exhibits A-18 and A-19 were used to simulate the drinking water population at each facility as follows:

- Identify the drinking water survey response category for the facility using the facility's zip code. The number of people served by groundwater and surface water are recorded. (If there is no response, the facility is in the no response category.)
- Identify the distance to the off-site point of detection from the release matrix (see the section above on potential and detected releases).
- Using the drinking water survey response category and the distance, simulate the well type and surface water use at the facility by drawing a random number for each and comparing it to the appropriate column in the well type and surface water use tables, respectively.
- The drinking water population from groundwater usage is estimated as follows for each well type:
  - **Well Type I: Single Residential**. The number of people within the distance to the off-site point of detection are assumed to be affected. This is estimated using the population density for the county and the distance to the off-site point of detection.

- **Well Type 2: Municipal**. The number of people served by groundwater, as reported in the drinking water survey.

- **Well Type 3: Other Uses**. Number of people set to zero.

- **Well Type 4: Single Residential and Municipal**. Sum of people calculated for well types 1 and 2.

- **Well Type 5: No Wells**. Number of people set to zero.

- The drinking water population from surface water usage is estimated as follows for each use type:

  - **Use Type 1: Water Present but Not Used**. Number of people set to zero.

  - **Use Type 2: Drinking**. The number of people served by surface water as reported in the drinking water survey.

  - **Use Type 3: Recreation**. Number of people set to zero.

  - **Use Type 4: Other Uses**. Number of people set to zero.

  - **Use Type 5: Drinking and Recreation**. Number of people served by surface water as reported in the drinking water survey.

  - **Use Type 6: No Surface Water Present**. Number of people set to zero.

- The total drinking water population is estimated as the sum of the ground and surface water populations.

The result of this method is an estimate of the number of people using surface and groundwater that originates from near the facility. The approach starts with the drinking water survey data, and adjusts them to reflect the results of the site visit survey data. It should be recognized that this simulated drinking water population is generally not affected by releases at the facility. Only when releases are simulated to migrate off site does this population play a role in claims. (In the Simulation 1 Model run, releases migrated off site at fewer than 15 percent of the facilities.)

A.2.3 Modeling of Releases

Seven release types were modeled based on release matrices produced by the Release Simulation Model developed by Battelle Pacific Northwest Laboratories as part of this PCLTF assessment project. The Release Simulation Model was implemented separately from the PCLTF Simulation Model, primarily for computing efficiency. The same existing facility population which forms the basis for the PCLTF Simulation Model was used in the Release Simulation Model. A detailed description of the Release Simulation Model is provided in Appendix B. Below, we define the seven release types modeled, and then describe the release matrices and how they were used in the PCLTF Simulation Model.

Definition of the Releases[21]

A release from a hazardous waste disposal facility can be defined in a variety of ways. For example, any migration of waste outside of containment may be considered a release. Alternately, a release may have occurred only if a certain critical rate of migration outside of containment is achieved. For the purposes of this analysis, six releases were defined based on two characteristics: location and concentration. A seventh release type was defined in terms of location only. Release types 1 through 6, displayed in Exhibit A-20, were formed by combinations of two locations and four concentrations. Each location and concentration is described below.

- **On-Site Monitoring Well**. The on-site monitoring well is the first location where the owner/operator may find evidence of a release into groundwater. For facilities designed with single liners, this location was assumed to be at the perimeter of the waste and at the depth of the water table (i.e., the uppermost aquifer). For facilities with double-liner leak detection systems, this location was assumed to be between the two liners. In the discussions below, this location is referred to as "on-site."

- **Closest Off-Site Potable Well or Naturally Occurring Body of Surface Water**. The off-site location where individuals (in the general population) could first become exposed to the hazardous waste migrating out of containment into groundwater is the potable well or body of surface water closest to the facility boundary. This location represents the point of first potential off-site exposure. The distance to this location, referred to here as "off-site," may vary considerably. Some facilities are within 1000 feet of groundwater wells used to supply drinking water; others are miles away from any potable well or surface water. Distributions describing the distances to this off-site location likely to be observed at land disposal facilities were developed based on data from EPA's surface impoundment assessment survey.[22]

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[21] This section is essentially identical to the definition of the release types presented in Chapter 2 of Volume I. The reader interested in a more detailed definition of the release types should refer to Appendix B.

[22] Separate distributions describing distances to the off-site location were developed for different parts of the 48 states analyzed in the Release Simulation Model. These distributions were estimated based on "Surface Impoundments and Their Effects on Groundwater Quality in the United States -- A Preliminary Survey," U.S. Environmental Protection Agency, 510/9-78-005, June 1978.

EXHIBIT A-20

SIX RELEASE TYPES DEFINED IN TERMS OF LOCATION AND CONCENTRATION

Release Type	Location	Concentration
1	On-Site Monitoring Well	Change in Indicator Parameters
2	On-Site Monitoring Well	Detectable Concentration of Constituents
3	On-Site Monitoring Well	Toxic Concentration of Constituents
4	Closest Off-Site Potable Well or Naturally Occurring Body of Surface Water	Detectable through Taste and Odor
5	Closest Off-Site Potable Well or Naturally Occurring Body of Surface Water	Detectable Concentration of Constituents
6	Closest Off-Site Potable Well or Naturally Occurring Body of Surface Water	Toxic Concentration of Constituents

- **Change in Indicator Parameter**. The concentration of hazardous waste which would be required in order to result in a change or increase in an indicator parameter in groundwater was defined for each EPA waste code. The indicator parameters used were total organic carbon (TOC) and total disolved solids (TDS).[23] The trigger TDS concentration was defined as 100 percent higher than the background TDS level.[24] The trigger concentration for TOC was defined as 10 ppm. (The TOC trigger does not vary throughout the country because most groundwater is very low in organic content.) This concentration is referred to here as "indicator parameter" or IP.

- **Detectable Concentration of Constituents**. The concentration of priority pollutant constituents which would lead to their identification during routine analysis was defined as the detectable concentration. For organic constituents, a 10 µg/l detectable concentration was used based on the expected sensitivity of standard gas chromatography/mass spectrometry analysis techniques.[25] For inorganic constituents analyzed through indirectly-coupled plasma emission spectrometry, a detection limit of 20 µg/l is used.[26]

- **Toxic Concentration of Constituents**. The toxic concentration was defined as the criteria level set for each of the 129 priority pollutants. If the pollutant is carcinogenic, this concentration implies an increased risk of cancer of one in one-million based on a 70-year period of exposure. Toxicity levels for non-priority pollutants were not defined.

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[23] The indicator parameters pH and total organic halides were not used. pH values were not simulated because there were very few data about the large influence of local soil conditions. Total organic halides were reflected in the use of TOC. TDS was used here as a substitute for conductivity, a commonly used and easily measured indicator parameter. The conductivity of wastes and natural waters are not well catalogued. The TDS for each waste code was estimated using the solubility of its inorganic constituents. The TOC for each waste code was estimated as the sum of the carbon portions of each water-soluble organic constituent.

[24] Background TDS levels were identified for different areas of the country from "Surface Impoundments and Their Effects...," op. cit.

[25] The analysis techniques are described in "Guidelines Establishing Test Procedures for the Analysis of Pollutants; Proposed Regulations," Federal Register, December 3, 1979, pp. 69464-69575.

[26] Ibid.

- **Detectable through Taste and Odor**. Taste and odor threshold concentrations were identified for the hazardous waste constituents.[27] Taste thresholds were utilized where available. In cases when only odor threshold values for airborne concentrations were available, the concentrations in water needed to yield the airborne vapor concentration thresholds were identified.

The seventh release type is different from the six discussed above in that it does not have a concentration as part of its definition. It was defined as the overflow of contaminated leachate from the facility. This release occurs when the cap on a closed land disposal process allows more water to infiltrate into the facility than the facility can hold or pass through. This is often referred to as the "bathtub" effect because it resembles a bathtub overflowing. It could be caused by excessive erosion of a clay cap or the failure of a synthetic membrane cap.

These seven release types were chosen in order to model the process of detecting and responding to releases. Each release type could be detected by one or more monitoring actions which may be undertaken at the facility. Additionally, the detection of each release type may lead to a particular set of monitoring actions, response actions, or claims.

For example, routine monitoring actions at the facility may lead to the discovery of release type 1, IP on site. As the result of this discovery, more detailed sampling and analysis may be required at the facility for a certain length of time. This more detailed analysis may be capable of detecting release type 2, detectable concentration on site, and release type 3, toxic concentration on site, if and where they occur. The discovery of one or both of these releases may lead to another set of actions, which may include a corrective action and/or monitoring off site, for example. If on-site monitoring fails to detect a release, the appearance of taste or odor at the off-site location could be the first indication of a release.

Relationships defining how release detection leads to monitoring and response actions were adopted; these relationships correspond to current RCRA regulations. These relationships are discussed in Section A.3.2, Regulatory Policy. Here it is important to note that the seven release types defined above form the lowest level of detail achievable in the Model's analysis of releases. Actions at the facility level were simulated as the result of the simulated detection of these releases. This level of detail enables the Model to be used for a variety of policy analyses. For example, the implications of alternative RCRA policies which identify those monitoring and response actions required due to the detection of releases can be assessed.

The next section describes how the release matrices were used to simulate releases at the facility level.

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[27] F.A. Fazzalori, Compilation of Odor and Taste Threshold Values Data, American Society for Testing Materials, 1978.

Release Matrices

The Release Simulation Model produced 24 release matrices which were used to simulate releases at the facility level in the PCLTF Simulation Model. A total of 24 matrices were developed by:

- dividing the country into four hydrogeologic regions; and
- analyzing each region six times, one time for each of six process designs.

The choice of the four hydrogeologic regions was based on an analysis of twelve smaller regions. This analysis indicated strong similarities in the release estimates across some regions. Regions with similar release estimates were combined, resulting in the four regions displayed in Exhibit A-21.

The six design types analyzed represent the seven prototype designs developed as part of the Release Simulation Model (see Exhibit A-22). The prototype designs represent possible configurations of layers at different land disposal processes. Design types 1 through 7 are all observed at existing facilities. Design types 3, 4 and 5 satisfy EPA design requirements for new processes and are consequently assigned to new facilities. Design types 4 and 5 were combined into a single design category because their release estimates were very similar. Therefore, a total of six design categories were used.

An illustrative release matrix is shown in Exhibit A-23. Each of the 24 release matrices has approximately 1,500 rows (Exhibit A-23 only shows the first 10 rows). Each row is an independent estimate of when each of the seven release types may occur (measured in years since the process began accepting wastes). Consequently, a process (e.g., a landfill) located in a given hydrogeologic region has an equal chance of having releases as described by each row.

Also reported in each row of the release matrices is the simulated distance to the off-site point of detection which underlies the estimated times to the off-site releases. Because this simulated distance plays an important role in both the estimates of the times to the off-site releases and the estimates of the costs of claims and cleanup, the distance must be reported by the Release Simulation Model for use in the PCLTF Simulation Model. By using the simulated distance in conjunction with the estimates of release times, consistency is maintained in the simulation of both releases and costs.

To simulate releases at the facility level, the following steps are performed:

- identify the hydrogeologic region in which the facility is located;

EXHIBIT A-21

FOUR HYDROGEOLOGIC REGIONS USED IN THE SIMULATION OF RELEASES

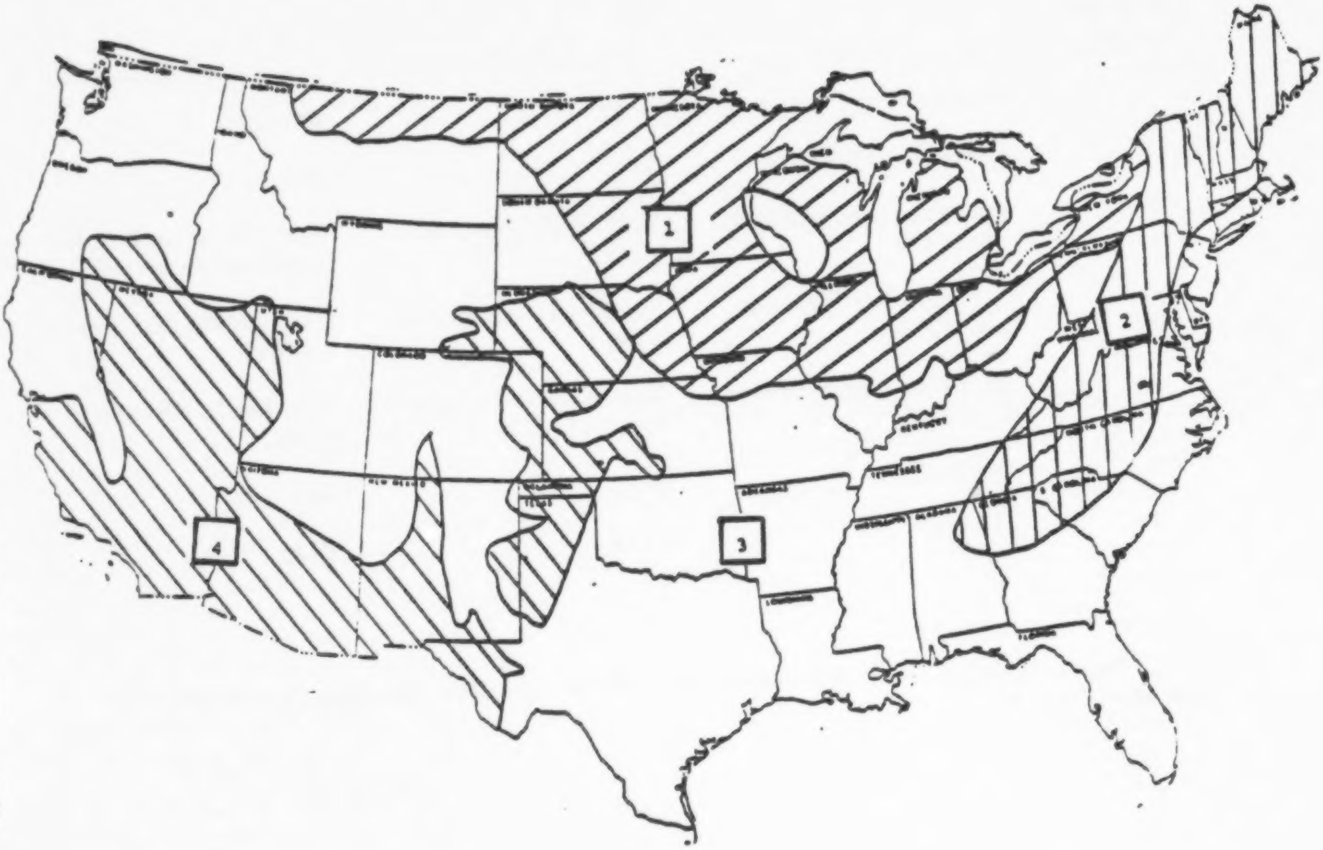

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EXHIBIT A-22

PROTOTYPE PROCESS DESIGNS USED IN PCLTF SIMULATION MODEL[1]

Prototype Design	Process	Cover	Liner
1	Surface Impoundment	Clay	Unlined
2	Surface Impoundment	Clay	Clay
3	Surface Impoundment; Landfill	Synthetic membrane; clay	Synthetic membrane; bedding material
4	Surface Impoundment; Landfill	Synthetic membrane; clay	Two synthetic membranes
5	Surface Impoundment; Landfill	Two synthetic membranes; clay	Synthetic membrane; clay
6	Landfill	Clay	Unlined
7	Landfill	Clay	Clay

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[1] These designs were developed for use in the Release Simulation Model. See Appendix B.

EXHIBIT A-23

ILLUSTRATIVE RELEASE MATRIX[1]

Iteration Number	Time to Each Release Type (Years Since Facility Opening) 1	2	3	4	5	6	7	Distance to Off-Site Point of Detection (feet)
1	999[2]	25	30	999	50	60	999	2,000
2	50	45	999	999	999	999	999	1,000
3	10	8	8	15	13	13	999	800
4	20	40	15	50	60	70	999	4,000
5	999	999	999	999	999	999	999	600
6	999	110	999	999	999	999	999	8,000
7	40	70	999	999	80	999	999	10,000
8	90	50	90	100	60	60	999	5,000
9	30	999	999	999	999	999	999	9,000
10	999	40	38	50	50	46	999	2,000
.								
.								
.								

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[1] Values are for illustrative purposes only.

[2] 999 means release was not observed in first 125 years.

- for each land disposal process (i.e., surface impoundment, landfill),[28] do the following:
  - identify its simulated design;
  - based on the simulated design and the facility's hydrogeologic region, identify the appropriate release matrix;
  - randomly draw a row from the release matrix;[29]
- the releases at the facility are taken to be the first occurrence of the releases simulated at each of the disposal processes; and
- the simulated distance for the facility is the minimum distance simulated at each of the disposal processes.

This procedure results in a timing of each release type being assigned to each facility. Additionally, a distance to the off-site point of detection is assigned which is consistent with the simulated release times. Facilities with multiple disposal processes require more than one draw from the release matrices. Because more than one process design may be present at a facility with more than one process, a facility may draw from up to two different release matrices or may draw up to two times from a single matrix (once each for landfill and surface impoundment).

Releases at new facilities are simulated in a slightly different manner. Because new land disposal processes must satisfy EPA's design and siting requirements (including public participation), it is expected that the locations of new facilities are likely to be "better" than the locations of existing facilities; better in the sense that releases will be less likely to occur. Therefore, for the purpose of modeling releases, the Model has been designed to allow the user to identify the extent to which the new locations are better.

To model better locations, the user first chooses one of the seven release types as a basis for selecting new facility locations. In current simulations, release type 2, detectable concentration of constituents, was adopted. Then the user identifies the fraction of existing facility locations which is expected to approximate the distribution of new facilities. For example, in current simulations, it was assumed that new facilities would perform (in terms of the chosen release type 2) as well as be in the top one-third of all existing facilities. Therefore, only the top one-third of all existing facility locations (in terms of the time it takes for release type 2 to occur) is available as a basis for simulating new facility locations. Releases at new facility locations are drawn randomly from the top fraction (one-third in current simulations) of release times at existing facility locations.[30]

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[28] Releases are not simulated for injection wells and land treatment processes.

[29] To reduce the variance across runs, the draws from the release matrices are always made in the same random order. Also, draws from the matrices are made without replacement.

A.2.4 Actions

Actions refer to a set of activities undertaken at hazardous waste disposal facilities. The PCLTF Simulation Model was designed to incorporate those actions necessary to model the process of release detection and response. This section describes the characteristics of each of the actions included in the Model.

The material in this section is presented using the action definitions and characteristics adopted in the current simulations. These values correspond to the actions required under current EPA regulation,[31] as well as several additional actions not currently covered by regulation. Although these values have not been varied in the Model runs performed to date, it should be noted that any set of actions can be analyzed using the PCLTF Model, so long as it can be defined using the action characteristics built into the Model. By defining actions in terms of their characteristics and allowing the user to vary any or all of the characteristics as desired, the Model remains very flexible. This flexibility is very valuable because the Model is capable of examining the implications of altering a characteristic of an action or of analyzing an alternative set of actions.

Not discussed here is the definition of when and under what circumstances the actions are simulated to be taken at facilities. Section A.3.2, Regulatory Policy, describes the manner in which the Model user defines how actions are simulated, i.e., the "action policy." The action policy adopted in the current simulations corresponds to current EPA regulations.

The actions are divided into three types: monitoring actions, response actions, and post-closure care actions. All the actions are characterized in terms of the following general properties:

- duration;
- ability to detect releases;
- capital costs; and
- operation and maintenance (O&M) costs.

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[30] If a fraction of 1.0 (i.e., 100 percent) were used, the distribution of releases at new facility locations would be drawn from the full distribution at existing facility locations, meaning that both new and existing facilities would have the same distribution of releases.

[31] See 40 CFR 246 Subpart F for current monitoring and corrective action requirements.

The duration is the length of time (in years) that it takes to complete the action. The ability to detect releases refers to whether the action can detect one or more of the seven release types when they are simulated to occur at the facility. Capital costs pertain to one-time costs for the planning and construction of equipment (i.e., the placement and construction of monitoring wells) at each facility. Capital costs are spread over a capital investment period, which is the time required for planning and construction to take place. During this period, the action is unable to detect releases. O&M costs are the annual costs of the action, and may include equipment maintenance and costs for the sampling and analysis of groundwater.

In addition to these characteristics, response actions are also defined in terms of their ability to clean up contaminated groundwater and to prevent and delay releases. The following sections describe each action and its properties.

A.2.4.1 Monitoring Actions

The PCLTF Simulation Model considers five monitoring actions. The characteristics of each are summarized in Exhibit A-24. The exhibit displays the releases each monitoring action can detect, its capital investment period, and its required duration. Each action is discussed separately.

Routine Monitoring for Indicator Parameters at On-Site Monitoring Wells

Routine monitoring for indicator parameters is analogous to detection monitoring required at all land disposal facilities.[32] This action is capable of detecting release type 1, a change in indicator parameters, and release type 7, the bathtub effect.[33] It is modeled without a capital investment period because the action is assumed to be required in perpetuity.[34] (This means that the action can continue so long as someone is available and required to pay for it (e.g., the PCLTF). This duration is a characteristic of the action, not the policy of who must undertake the action.) Periodically, the monitoring wells must be refurbished or replaced, and this capital cost was amortized over the life of the wells and added to the O&M cost.[35] The range of capital costs for constructing four wells is displayed in Exhibit A-25. Also displayed is the range of annual sampling and

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[32] See 40 CFR 264, subpart F, Detection Monitoring Program.

[33] If an individual is performing this action, it is assumed that when he visits the facility, he will be able to observe the occurrence of release type 7.

[34] The action stops when a more extensive action, such as monitoring for constituents, is begun. However, when the more extensive action or actions are completed, this action resumes.

[35] A well life of 25 years was assumed.

EXHIBIT A-24

CHARACTERISTICS OF MONITORING ACTIONS

Action	Release Type 1/ 1	 2	 3	 4	 5	 6	 7	Capital Investment Period (Years)	Duration (Years)
Routine Monitoring for Indicator Parameters at On-Site Monitoring Wells	D* 2/						D	(NA) 4/	Ongoing in perpetuity
Monitoring for Waste Constituents at On-Site Monitoring Wells	D*	D*	D*				D	(NA)	Lifetime or 30 years
Plume Delineation and Tracking On Site 5/	D 3/	D	D				D	1	30 years
Monitoring for Waste Constituents at Off-Site Monitoring Wells					D	D	D	1	30 years
Plume Delineation and Tracking Off Site 5/					D	D	D	1	30 years

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1/ Release Types:
   1. Change in Indicator Parameters at the On-Site Monitoring Well
   2. Detectable Concentrations of Constituents at the On-Site Monitoring Well
   3. Toxic Concentrations of Constituents at the On-Site Monitoring Well
   4. Taste and Odor Off Site
   5. Detectable Concentrations of Constituents Off Site
   6. Toxic Concentrations of Constituents Off Site
   7. The "Bathtub Effect." If any of the five monitoring actions are being performed, then this release type may be observed, and consequently, by definition, detected.

2/ D* indicates that monitoring action can detect release only if monitoring wells are placed correctly. See text.

3/ D indicates that monitoring action can detect release.

4/ Not Applicable.

5/ Plume delineation and tracking is not modeled as a separate action in the current simulations. Instead, it is considered as part of the fluid removal and treatment actions. Characteristics shown are illustrative values which might be used if plume delineation were treated as a separate action.

EXHIBIT A-25

MONITORING ACTION COSTS[1]

	Lower Bound	Upper Bound
Range of capital costs for construction of 4 monitoring wells[2]	\$25,000	\$50,000
Range of annual sampling and analysis costs for monitoring for indicator parameters, 4 wells[3]	\$ 1,000	\$ 2,000
Range of annual sampling and analysis costs for monitoring constituents, 4 wells[4]	\$ 1,750	\$ 3,000
Range of annual sampling costs for plume delineation and tracking[5]	\$ 3,500	\$ 6,000

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[1] All costs reflect a range of boring depths of 25 to 150 feet. Costs are much higher for depths greater than 150 feet.

[2] Costs include:
- well construction;
- plan development; and
- report preparation.

[3] Costs include:
- annual sampling of water quality parameters (chloride, iron, manganese, phenols, sodium, sulfate); and
- semi-annual sampling of indicators of contamination (pH, specific conductance, total organic carbon, total organic halogen).

[4] Costs include:
- annual sampling of water quality parameters;
- semi-annual sampling of indicators of contamination; and
- analysis for the presence of hazardous waste constituents.

[5] ICF estimate. Assumed to be twice the costs of annual sampling and analysis of constituents because more samples are taken and analyzed for plume delineation and tracking. Because plume delineation and tracking are not modeled as a separate action in the current simulations, these costs are treated as part of fluid removal and treatment. See Exhibit A-28.

Source: Geraghty & Miller, Inc., "Development of Groundwater Monitoring Requirements and Costs for Current RCRA Regulatory Requirements," working paper, January 1982.

analysis costs. Costs are simulated each time the action is initiated by randomly drawing from a uniform distribution bounded by the ranges shown in Exhibit A-25.

The ability of this monitoring action to detect changes in indicator parameters on site also depends on the accurate placement of the on-site monitoring wells. Only if the wells are placed correctly (i.e., at the correct depth and location relative to plume movement) will this action be able to detect releases. (Exhibit A-24 displays this requirement for correctly placed wells with an asterisk.) Because some hydrologies are exceedingly complex, it is likely that some number of facilities may have monitoring systems that were improperly designed or installed. Additionally, a system which was initially placed correctly may fail because of subsequent changes in groundwater flow caused by nearby construction, pumping, or grading. However, the frequency with which monitoring wells are incorrectly placed (thus making them unable to detect releases) is not well known and no basis exists for quantifying it.

To model this phenomenon, the Model user supplies an estimate of the probability with which the on-site monitoring wells will fail to detect a release when it occurs (i.e., the chance that the wells are placed incorrectly). In the current simulations, this probability was assumed to be 25 percent.[36] The placement of each facility's on-site wells is characterized by drawing a random number and comparing it to this probability. The placement of the on-site wells is determined only once for each facility.

Monitoring for Hazardous Waste Constituents at On-Site Monitoring Wells

Monitoring for hazardous waste constituents is analogous to compliance monitoring and is required at land disposal facilities when detection monitoring indicates a release has occurred.[37] No capital expenditure period is used for this action because the same on-site wells used for monitoring indicator parameters are assumed to be used. Consequently, the capital costs are amortized over the well life and added to the O&M costs. The range of O&M costs used in the current simulations is displayed in Exhibit A-25.

Because the same on-site monitoring wells are assumed to be used, the ability to detect hazardous waste constituents with this action depends on the correct placement of the on-site monitoring wells. If the wells were simulated to be placed correctly at the facility (the probability of which is defined by the user as described above), then this monitoring action can detect changes in indicator parameters on site (release type 1), detectable concentrations of constituents on site (release type 2), and toxic concentrations of constituents on site (release type 3).[38] The bathtub effect (release type 7) is assumed to be observable if this action is ongoing.

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[36] A lower value (e.g., 5 percent) means that more releases are caught before going off site. Consequently, more opportunity exists to take response actions to prevent off-site releases from occurring.

[37] See 40 CFR 264, subpart F, Compliance Monitoring Program.

The duration of this action is simulated as the maximum of 30 years or the operating lifetime of the facility. This is consistent with current EPA regulations.

Plume Delineation and Tracking On Site

The current simulations do not model either on- or off-site plume delineation as separate actions; rather, they are modeled as part of on- and off-site fluid removal and treatment, respectively. It is possible, however, to model plume delineation separately by specifying the appropriate inputs. Plume delineation and tracking on site can be performed to identify the extent of groundwater contamination and to track the movement of the plume. This action can be used in the Model to simulate whether: (1) the plume of concern has already migrated off site; and (2) the contamination will migrate off site in the future, if it has not already done so. This action may be modeled as a response to the detection of hazardous waste constituents on site. Because it required whenever a corrective action is taken, plume delineation and tracking on site is combined with fluid removal and treatment on site to form a single action.[39]

Exhibit A-26 displays a series of capital costs for plume delineation and tracking as a function of plume size[40] and depth of well borings which might be used if plume delineation and tracking were trated as separate actions. Although some planning is required to determine the placement of the wells, the capital investment period or assumed to be one year. The capital costs

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[38] If the toxic concentration is less than the detectable concentration, then this action can detect the toxic release only once the detectable release has occurred.

[39] See 40 CFR 264, subpart F, Corrective Action Program. In the Model, plume delineation and tracking can be modeled separately from an overall corrective action (which would include fluid removal) so that alternative policies defining when this action should be undertaken could be examined. For example, by defining this action separately, it was possible to model a policy requiring plume delineation before making a determination on the need for fluid removal. The information on the potential for off-site migration of the plume (supplied by this action) can be utilized in the simulated decision regarding the need for fluid removal. Currently, however, plume delineation and tracking are not treated as an action separate from fluid removal and treatment.

[40] We assumed the plume size is the sum of facility's process sizes plus an additional 15 percent to account for administrative buildings and space between the facility processes.

EXHIBIT A-26

PLUME DELINEATION AND TRACKING CAPITAL COSTS 1/
(Thousands of 1982 Dollars)

Depth (feet)	Plume Size (square feet)							
	20,000	50,000	500,000	1,250,000	2,000,000	5,000,000	8,000,000	20,000,000
25	15.0	15.0	32.5	37.5	40.0	46.0	59.0	80.0
50	22.5	22.5	44.0	50.0	56.0	65.0	80.0	108.0
75	26.0	26.0	55.0	65.0	73.0	85.0	104.0	138.0
100	34.0	34.0	67.5	82.5	91.0	104.0	126.0	170.0
200	60.0	60.0	120.0	138.0	153.0	187.5	225.0	300.0

1/ Costs include:

- o groundwater quality assessment plan;
- o test borings;
- o conversion of test borings to monitoring wells;
- o test boring abandonment;
- o groundwater sampling;
- o groundwater sample analyses; and
- o consultant fee.

Assumptions include:

- o I boring/acre; and
- o borings spaced 100 feet apart around perimeter of plume.

SOURCE: Geraghty & Miller, Inc., "Cost Estimates for Containment of Plumes of Contaminated Groundwater," working paper, March 1982, p. 44.

are assumed to be borne during this time. The annual sampling and analysis costs were assumed to be two times the annual sampling and analysis costs for monitoring constituents (see Exhibit A-25). This assumption was made because there are more wells and samples required for plume delineation and tracking than for monitoring constituents. Because plume delineation is modeled as part of fluid removal and treatment in the current simulations, its costs (both capital and O&M) are reflected in the costs of fluid removal and treatment.

This action can detect indicator parameters on site (release type 1), detectable and toxic concentrations of constituents on site (release types 2 and 3), and the bathtub effect (release type 7).

Monitoring for Hazardous Waste Constituents Off Site

This monitoring action is analogous to on-site monitoring for hazardous waste constituents, but takes place at an off-site location. This action can detect constituents off site (release types 5 and 6) and the bathtub effect (release type 7).

We assumed a capital investment period of one year for this action. This action's capital costs are the construction costs for four monitoring wells which are placed off site. These costs, displayed in Exhibit A-25, are assumed to be borne when the action is taken. The sampling costs are the same for monitoring constituents on site (see Exhibit A-25).

Plume Delineation and Tracking Off Site

Plume delineation and tracking off site is analogous to plume delineation and tracking on site, but takes place at an off-site location. Again, it is not modeled as a separate action but is instead simulated as a part of fluid removal and treatment. If treated as a separate action, its capital costs (as a function of plume size[41] and depth of well borings) and its sampling and analysis costs would be the same as for plume delineation and tracking on site (see Exhibits A-25 and A-26). This action can detect constituents off site (release types 5 and 6) and the bathtub effect (release type 7). In addition, this action can identify whether a release will exceed toxic concentrations off site, if it has not already done so.

A.2.4.2 Response Actions

Response actions are performed for the purpose of cleaning up releases which have occurred and preventing or delaying future releases. Additionally, response actions may be defined as having the ability to detect releases when they occur. Because the response actions are the only available means for cleaning up contaminated groundwater and preventing releases, they play an important role in the PCLTF Simulation Model. The way in which these actions are simulated to influence groundwater contamination is described in section A.3.5, The Effect of Response Actions on Releases. This section presents the characteristics of the response actions themselves.

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[41] Plume size is estimated as the area of a rectangle with a length equal to the distance to the off-site point of detection and a width equal to the facility width times a dispersion factor. This dispersion factor serves to increase the simulated width of the plume in proportion to the length of the plume.

The PCLTF Simulation Model considers three response actions: cap repair (surface sealing), fluid removal and treatment on site, and fluid removal and treatment off site. The current simulation values for each action are summarized in Exhibit A-24. Each action is discussed separately.

Cap Repair (Surface Sealing)

Surface sealing refers to the repairing of the site cover. This may include placing recompacted clay on the site, improving drainage and grading, and taking other measures to reduce infiltration into the site. As shown in Exhibit A-27, surface sealing is assumed to prevent or delay the bathtub effect (release type 7).

Because surface sealing is assumed to take one year to complete, it has no O&M costs. The capital costs for surface sealing are a function of the size of the cap. Based on available estimates,[42] we assumed the following range for costs per acre (in 1982 dollars):

lower bound:	$ 6,500
median value:	$20,000
upper bound:	$40,000

Given the sizes (in acres) of the facility's processes, the costs for surface sealing were simulated by: (1) drawing a random number to determine whether the cost is above or below the median, (2) drawing randomly from the range of the median and the appropriate bound, and (3) multiplying the simulated cost per acre by the facility's size.

Fluid Removal and Treatment On Site

Fluid removal and treatment on site is analogous to a corrective action.[43] It is assumed to be able to clean up groundwater contaminated due

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[42] The surface sealing estimates identified were:

- $6,500 to $32,620 per acre: Geraghty & Miller, op. cit;
- $4,000 to $20,000 per acre: IR&T, op. cit; and
- $27,000 to $37,500 per acre: SCS Engineers, op. cit.

[43] Corrective action is required at land disposal facilities when compliance monitoring demonstrates certain levels of groundwater contamination. In the current simulations, this action includes plume delineation and tracking on site (see the description of monitoring actions). See 40 CFR 264, subpart F, Corrective Action Program.

EXHIBIT A-27

CHARACTERISTICS OF RESPONSE ACTIONS

Action	Release Type 1/ 1	2	3	4	5	6	7	Capital Investment Period (Years)	Duration (Years)
Surface Sealing							D 2//P 3/	1	1
Fluid Removal and Treatment On Site	D/P	D/P	D/P	P	P	P		5	100
Fluid Removal and Treatment Off Site				P	D/P	D/P		5	100

1/ Release Types:

1. Indicator Parameters On Site
2. Detectable Constituent Concentrations On Site
3. Toxic Constituent Concentrations On Site
4. Taste and Odor Off Site
5. Detectable Constituents Off Site
6. Toxic Constituents Off Site
7. The "Bathtub Effect"

2/ D indicates that response action can detect release.

3/ P indicates that response action can prevent or delay release.

to release types 1, 2, and 3. Further, because cleaning up contaminated groundwater on site will prevent it from migrating off site, this action can prevent (or delay) the occurrence of release types 1 through 6 (if they have not already occurred). If releases have already occurred off site, then this action was assumed to have no influence on the off-site release.

The capital investment period for fluid removal and treatment was assumed to be five years because time is required to locate the contaminated plume and set up the well system for fluid removal and treatment. Although part of the plume may be delineated within a year, it may take a few years before the contaminated plume is fully identified.

It was assumed to take 100 years to complete this action fully. There is considerable uncertainty surrounding the time needed to clean up a site fully. This estimate reflects the fact that if the contaminant source is not removed, fluid removal and treatment will be required continuously. If the action were stopped, plume growth might be expected to resume immediately. Duration also plays an important role in the relationship used to define the influence which response actions have on releases (see section A.3.5, The Effect of Response Actions on Releases).

The costs of fluid removal and treatment were calculated based on the output of a stochastic simulation model.[44] This cost model simulated the costs of fluid removal and treatment under several different conditions. Based on plume dimensions and hydrogeologic characteristics, appropriate response actions were modeled. The model chose the most efficient removal option available and then simulated either one or more of the following fluid treatment methods:

- No treatment;
- Carbon adsorption;
- Ion exchange; and
- Reverse osmosis.

The result was a 1,000-observation data file with information on fluid removal and treatment costs as well as other key variables.

The cost model operates under the assumption that the source of the contamination may be removed, which would reduce the necessary duration of groundwater removal. The PCLTF Model, however, does not incorporate the cost of this removal nor is such removal currently required by regulation. Consequently, the duration of the fluid removal and treatment actions has been set to 100 years to reflect the ongoing need for fluid removal and treatment which arises if the contaminant source is not removed.

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[44] Geraghty & Miller, Inc., "Stochastic Model of Corrective Action Costs at Hazardous Waste Management Facilities," January, 1984.

Because the PCLTF Model simulates plume dimensions, a method has been developed to estimate cleanup costs as a function of plume size. However, other factors create additional variation in costs after accounting for plume size. Consequently, the method incorporates this uncertainty.

Based on plume size (i.e., plume length times plume width), the 1,000 observations in the cost-model data file were sorted into eight groups. Within each group, the mean plume size along with the distribution of both capital and O&M costs were estimated. The results are displayed in Exhibit A-28.

Using the information in Exhibit A-28, the Model simulates the cost of on-site fluid removal and treatment in the following way.

STEP ONE: A random number is drawn and assigned to each facility for the duration of the iteration.

STEP TWO: Plume size is estimated as the sum of the size of all processes at the facility plus 15 percent.

STEP THREE: Using estimated plume size and the random number from step one, costs are estimated from Exhibit A-28. Linear interpolation is used both horizontally and vertically to determine costs. If the plume's dimension is greater than 5,102,554 square feet, linear extrapolation is used to determine costs; however, the maximum cost used is twice the maximum given in Exhibit A-28. O&M costs and capital costs are estimated using the same random number to ensure consistency between the two types of costs. Further, given that the random number is maintained at the facility level, cost estimations for a given facility are consistent with one another throughout the duration of the iteration.

Fluid Removal and Treatment Off Site

Fluid removal and treatment off site is analogous to fluid removal and treatment on site, except that the action is undertaken off site. This action both cleans up and can prevent off-site release types 5 and 6. In addition, it can prevent taste and odor problems from occurring (release type 4). In the current simulations, this action includes plume delineation and tracking. The capital and O&M costs for this action are based on the same cost data used for on-site fluid removal and treatment (see Exhibit A-28). Like on-site fluid removal and treatment, duration is set at 100 years. The following cost estimation process was process used.

STEP ONE: Total plume size is computed by adding on-site plume size (i.e., the sum of the facility's process sizes plus 15 percent) to the off-site plume size (i.e., a rectangle with a length equal to the distance to the off-site point of detection and a width equal to the facility width times one plus a simulated dispersion factor).

STEP TWO: Using the method described for on-site fluid removal and treatment, cleanup costs are estimated for a plume with dimensions equal to

EXHIBIT A-28

PROBABILITIES OF ON-SITE AND OFF-SITE FLUID REMOVAL AND TREATMENT COSTS
(Thousands of 1982 Dollars)

Cumulative Probability	Plume Size (square feet)							
	3,495	20,198	89,102	279,992	538,838	987,773	2,428,574	5,102,554
Capital Costs 1/								
.0000	173.6	202.7	210.7	242.5	262.3	314.8	417.0	417.0
.1875	237.9	262.5	276.6	314.5	448.0	438.9	697.3	697.3
.5000	291.1	326.2	351.4	422.8	686.4	675.2	1,111.2	1,197.9
.8125	387.7	418.7	440.2	683.5	1,167.6	2,452.8	2,452.8	6,548.0
1.0000	434.1	490.2	603.5	1,293.8	3,108.4	3,990.4	4,465.9	9,697.7
O&M Costs 2/								
.0000	22.7	31.5	34.9	36.0	48.0	53.1	76.4	76.4
.1875	30.5	38.1	43.5	47.8	73.0	76.0	113.2	118.0
.5000	39.2	48.8	55.6	75.4	121.9	121.9	210.7	243.3
.8125	53.3	59.6	74.2	118.8	226.3	338.5	338.5	1,299.1
1.0000	59.7	70.3	111.4	241.9	464.1	649.3	767.0	2,565.6

1/ Capital costs include:

- o Plume delineation
- o System design engineering
- o Well/drain installation
- o Construction engineering
- o Surface infrastructure
- o Fluid treatment
- o Capital replacement

2/ O&M costs include:

- o Well/drain system operation
- o Surface infrastructure
- o Fluid treatment
- o System monitoring

Source: ICF analysis of cost model simulation results. See Geraghty & Miller, Inc., "Stochastic Model of Corrective Action Costs at Hazardous Waste Management Facilities," January, 1984.

those determined in step one. The same random number used for estimating on-site cleanup is used again to ensure consistency.

STEP THREE: On-site cleanup costs are estimated in a manner identical to that described for the fluid removal and treatment on-site action.

STEP FOUR: The on-site cleanup cost is subtracted from the total cleanup cost to yield the cost of off-site fluid removal and treatment. This approach ensures that only the marginal cost of expanding cleanup from on site to off site is measured. This is an important consideration because under current regulation, it is extremely likely that an off-site cleanup will always be taken after or at the same time as an on-site cleanup.

A.2.4.3 Post-Closure Care

Post-closure care refers to the routine activities that are undertaken after the facility ceases accepting waste for land disposal and is closed. Based on an analysis by IR&T,[45] we identified seven components of post-closure care:

1. Maintain Benchmarks;
2. Maintain Soil Integrity of the Cap;
3. Security;
4. Fence Maintenance;
5. Gas Monitoring;
6. Leachate Monitoring; and
7. Leachate Collection and Removal.

Each activity is described using two factors: (1) the cost of the operation (e.g., the cost of maintaining the soil integrity of the cap) and (2) the proportion of facilities required to undertake the activity. The cost estimates for these operations were derived from the IR&T analysis and are described in the footnotes to Exhibit A-29. Because current regulations covering post-closure care indicate that all landfills, surface impoundments, and land treatment facilities (at which waste remains following closure) would be required to perform the same post-closure care activities, we utilized the same cost estimates for each of the seven post-closure care requirements for all these process types.

It was assumed that all facilities will be required to perform the first four operations (see Exhibit A-29), with cap maintenance being the most costly of these four items (for facilities over 16 acres in size). Fence maintenance

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[45] International Research and Technology Corporation (IR&T), An Analysis of Methods of Ensuring Continuity of Operation for Hazardous Waste Disposal, draft report submitted to EPA under Contract No. 68-01-5794 (undated). Because monitoring for indicator parameters is required in perpetuity (see 40 CFR 264, subpart F, Detection Monitoring Program), it is implicitly part of post-closure care. However, this action is modeled separately in the PCLTF Simulation Model.

EXHIBIT A-29

SUMMARY OF POST-CLOSURE CARE ACTIVITIES AND COSTS*
(1982 dollars)

Component of Care	Probability Required	Lower Bound	Median Estimate	Upper Bound	Source
1. Maintain Benchmarks	1.0	$60	$89	$118	IR&T, p. A-37
2. Maintain Cap	1.0	60/acre	118/acre	176/acre	IR&T, p. A-37
3. Security	1.0	2/acre	6/acre	12/acre	IR&T, p. A-37
4. Fence Maintenance	1.0	355/(acre). 5/	473/(acre). 5/	591/(acre). 5/	IR&T, p. A-37 1/
5. Gas Monitoring	0.05 2/	591	1,182	1,773	IR&T, p. A-21 3/
6. Leachate Monitoring	1.0	1,030	1,415	1,800	4/
7. Leachate Collection and Removal	1.0	210/(acre).^{477}	830/(acre).^{477}	1,450/(acre).^{477}	5/

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* Footnotes on following page.

Sources: IR&T, An Analysis of Methods of Ensuring Continuity of Operation for Hazardous Waste Disposal Sites, draft report submitted to EPA under Contract No. 68-01-5794 (undated); and "Cost of Groundwater Sampling and Analysis," Draft EPA Memo, May 20, 1982.

FOOTNOTES TO EXHIBIT 29

[1] Computed assuming facility is square so that its perimeter (the length of fencing) is equal to: $P = 4(A)^{.5}$; where A equals the area of the treatment process (e.g., landfill). IR&T's best estimate of the cost of fence maintenance is 5 percent of $29.20 per meter per year (where $29.20 per meter is the initial cost of the fence).

[2] IR&T referenced Arthur D. Little, Inc. as stating that approximately 5 percent of all facilities will likely need gas monitoring (IR&T, p. A-21).

[3] IR&T estimated the costs for gas monitoring during operation. Assuming monitoring is decreased during the post-closure period, its costs will be less. Using the IR&T assumptions of $100 to $300 per sample/analysis, five analyses per site, and reducing the frequency to once per year, the cost is $500 to $1,500 per year (1980 $).

[4] IR&T assumed leachate monitoring would be required at a subset of those facilities with leachate collection systems and stated that leachate monitoring will cost approximately the same as groundwater monitoring (p. A-20). However, IR&T's cost estimates of leachate and groundwater monitoring were made for monitoring during operation. Therefore, the monitoring costs from the EPA Memo were used. The costs were estimated as follows: $752 per year for analysis, and $278 to $1,030 per year for sampling, yielding $1,030 to $1,782 per year total. These cost estimates are consistent with IR&T's cost estimates for minimum analyses. (See pp. A-12 to A-16, IRT report.)

[5] These cost estimates were derived from the IR&T data, but are slightly lower than the IR&T cost estimates. This portion of the post-closure care cost estimate may be refined to take advantage of information on leachate generation which is estimated in the Release Simulation Model; however, IR&T treated these costs as independent of leachate quantity. These cost estimates were derived as follows:

- Number of cells per site:
    - 10 cells/15 acre site; 10 years of operation (IR&T, p. A-23)
    - 30 cells/150 acre site; 10 years of operation (IR&T, p. A-24)
    - 20 cells/30 acre site; 20 years of operation (IR&T, p. A-23)
    - 60 cells/300 acre site; 20 years of operation (IR&T, p. A-23)

These data can be fitted to two curves:
(1) number of cells = $2.75\ (\text{acre})^{.477}$: 10 years of operation
(2) number of cells = $3.95\ (\text{acre})^{.477}$: 20 years of operation.
These two curves can be averaged together as:
number of cells = $3.35\ (\text{acres})^{.477}$

FOOTNOTES TO EXHIBIT 29
(continued)

(fn. 5 continued)

- One pump required per cell (IR&T, p. A-23)
- Annual operation and maintenance cost per pump of approximately 2 percent of initial capital cost (IR&T, p. A-23)
- Approximately 5 percent of pumps replaced annually (IR&T, p. A-34) at a replacement cost of $3,000 each (IR&T, p. A-23).
- Total annual cost equals: $(0.02+0.05)(3000)(3.35/(\text{acre})^{.477}) = \$735/(\text{acre})^{.477}$ (1980 dollars)
- A range of uncertainty of plus and minus 75 percent (IR&T, p. A-37), and an upper bound of $36,000 (IR&T, p. A-38) were used.

Comparison with IR&T's leachate collection and removal estimate of $4,500 + 44.50/acre (p. A-37) yields (1980 $):

		SIZE IN ACRES			
		30	100	150	300
IR&T ESTIMATE		5,800	8,950	11,175	17,850
REVISED ESTIMATE	Upper	6,200	11,000	13,400	18,600
	Median	3,500	6,300	7,600	10,600
	Lower	900	1,600	1,900	2,700

was assumed to be required by all facilities, although no data were available upon which to base this assumption. The gas monitoring frequency was taken from the IR&T study. The leachate-related frequencies reflect the assumption that leachate will be required to be monitored and collected at all facilities with leachate collection systems. These leachate frequencies are very uncertain at this time.

The costs of each activity are determined at each facility as follows:

- to simulate whether the activity is undertaken, draw a random number and compare it to the probability of the activity being required;
- for activities undertaken, draw a random number to determine if the cost will be above or below the median cost estimate;
- draw from the range of the median estimate and the upper or lower bound to determine the activity's cost; and
- if appropriate, multiply the cost times the area of the facilty's processes (in acres) raised to the appropriate power.[46]

The sum of the costs of all seven activities is used as the estimate of the facility's post-closure care cost. Summaries of the individual cost components are not maintained by the Model.

A.2.5 Claims

Claims refer to compensation requested by third parties for harms they believe they have suffered as the result of off-site releases of hazardous waste. This section presents the definitions of the claims and the methods used to estimate their size (in dollars). The definition of when and under what circumstances claims are simulated to be brought is discussed separately in section A.3.2, Regulatory Policy.

Claims are divided into the following four categories:

- Personal injury;
- Real property;
- Economic loss; and
- Natural resource damage.

The division of claims into these categories is important, primarily for simulating their legal validity under state statutory and common law.[47] The above categories are somewhat artificial for the purpose of calculating the total dollar value of claimed damages. For example, if a farmer's irrigation wells were contaminated, the cost of providing an alternative supply of water suitable for irrigation could be placed in the economic loss category. However, the loss of the existing irrigation wells could also be valued in terms of its effect on the fair market value of the farmer's land. Presumably, the land would decrease in value due to the loss of the safe use of the wells. A decrease in property value however, falls under the real property damage category, not under the economic loss category. Therefore, the farmer could seek recovery under either claim category for the damage to his wells.

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[46] A minimum of one acre is used for the size of the facilities if the simulated facility size is less than one acre.

[47] The legal validity of claims is discussed in section A.3.6.

For this analysis, we have assumed that the following harms will fall under each of the categories:

- Personal injury: out-of-pocket medical expenses; lost time due to illness and mortality; costs of monitoring individuals' health conditions;
- Real property: reductions in property value;
- Economic loss: costs of alternative supplies of potable water; and
- Natural resource damage: lost recreation value; value of fish killed or contaminated; cost of dredging contaminated stream bed or lake bottom.

Each claim type is described separately below.

A.2.5.1 Personal Injury Claims

Personal injury claims are simulated by estimating the number of people who consider themselves to have been harmed by the off-site release of hazardous waste into groundwater, and by estimating the amount of compensation these people may request. Of particular importance is that this method is based on an assessment of those who may consider themselves to have been harmed, as opposed to those who were actually harmed. This distinction is important because the number of harmed people will likely be much smaller than the number of people who consider themselves harmed. Estimating personal injury claims based on harms alone could result in an underestimate.

The number of people who consider themselves to be harmed are, at a maximum, all those who came into contact with the ground or surface water contaminated by the off-site release. This number of people was calculated at the facility level by simulating:

- the usage of the ground and surface water near the facility; and
- the number of people using the ground and surface water as a source of drinking water.

These estimates are based on data from: EPA's site visit survey (1982); EPA's drinking water survey (1981); and the County and City Data Book (1977). Section A.2.2.2, Facility Attributes, describes the analysis performed at the facility level to simulate the number of people using water from near the facility for drinking (i.e., the drinking water population). This estimate is used as the basis for simulating personal injury claims at facilities with off-site releases. However, because these claims will arise in the future and because the compensation requested may vary by the age of the claimant, two adjustments to the drinking water population are required:

- divide the population into age groups; and
- adjust the number of people in each age group to reflect births, deaths, and aging over time.

Exhibit A-30 displays the data used to perform these adjustments.

Age categories were constructed at ten-year intervals from ages 0 to 99. The fraction of the U.S. population in each age group in 1980 was used to divide the simulated drinking water population into age groups. Because the age distribution of the population near facilities will vary from the age distribution of total U.S. population, this division into age groups will not be correct for individual facilities. However, the procedure will produce results representative of the mean across all facilities.

To reflect changes in population over time, the birth rate and probability of survival were used to estimate how the distribution of ages will vary over time. A matrix was developed that represents the size of each age category over time relative to its size in 1980. Exhibit A-31 displays this matrix. The age distribution in 1980 is taken as the distribution for the total U.S. population (see Exhibit A-30). To estimate the age distribution in 1990, the following steps were performed:

- Multiply each age category by one minus its probability of not surviving to obtain the size of the next older age category in the next time period (age category 2 in 1990 = age category 1 in 1980 times one minus the probability of not surviving from age category 1 to 2: 0.1430 = 0.1459 x (1.0 - 0.0198)).
- The size of age category 1 in the next time period equals the sum of the births in this time period (0.1606 = (0.1740 x 0.147) + (0.1803 x 0.577) + (0.1392 x 0.212) + (0.1005 x 0.011)).

Once the age distribution is calculated for 1990, the same procedure is used to estimate the age distribution for 2000, and so on.

Of note is that the matrix displayed in Exhibit A-31 is comprised of values reflecting the size of each age category relative to the 1980 population. Consequently, if personal injury claims are brought in year 2010, the size and age distribution of the drinking water population is estimated by

EXHIBIT A-30

1980 U.S. POPULATION DISTRIBUTION

	Age Category (years)	Fraction of 1980 U.S. Population[1]	Birth Rate[2]	Probability of Not Surviving to the Next Age Group
1.	0-9	0.1459	0.	0.0198
2.	10-19	0.1740	147.	0.0070
3.	20-29	0.1803	577.	0.0129
4.	30-39	0.1392	212.	0.0159
5.	40-49	0.1005	11.	0.0374
6.	50-59	0.1030	0.	0.0892
7.	60-69	0.0830	0.	0.1904
8.	70-79	0.0512	0.	0.3827
9.	80-89	0.0197	0.	0.6850
10.	90-99	0.0032	0.	1.0000
		1.0000		

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[1] Bureau of the Census, U.S. Department of Commerce, "Estimates of the Populations of the United States, by Age, Sex and Race: 1980 to 1982." Current Population Reports, Population Estimates and Projections Series P-25, No. 929, May 1983, Table 4, pp. 22-23.

[2] Births per 1,000 people (male and female) over the 10-year period, U.S. Department of Health and Human Services, "Health United States 1981," DHHS Publication No. (PHS) 82-1232, December 1981, p. 108.

EXHIBIT A-31

AGE DISTRIBUTION OF THE POPULATION OVER TIME

Age Category	Age (Years)	1980	1990	2000	2010	2020	2030
1	0-9	0.1459	0.1606	0.1604	0.1431	0.1445	0.1451
2	10-19	0.1740	0.1430	0.1574	0.1572	0.1402	0.1417
3	20-29	0.1803	0.1728	0.1420	0.1563	0.1561	0.1393
4	30-39	0.1392	0.1780	0.1706	0.1402	0.1543	0.1541
5	40-49	0.1005	0.1370	0.1751	0.1678	0.1379	0.1519
6	50-59	0.1030	0.0967	0.1319	0.1685	0.1616	0.1328
7	60-69	0.0830	0.0938	0.0881	0.1201	0.1535	0.1472
8	70-79	0.0512	0.0674	0.0760	0.0713	0.0972	0.1243
9	80-89	0.0197	0.0316	0.0416	0.0469	0.0440	0.0600
10	90-99	0.0032	0.0062	0.0100	0.0131	0.0148	0.0139

Age Category	Age (Years)	2040	2050	2060	2070	2080	2090
1	0-9	0.1355	0.1327	0.1319	0.1263	0.1226	0.1207
2	10-19	0.1422	0.1328	0.1301	0.1293	0.1238	0.1201
3	20-29	0.1907	0.1412	0.1319	0.1292	0.1284	0.1229
4	30-39	0.1375	0.1389	0.1394	0.1302	0.1275	0.1267
5	40-49	0.1516	0.1353	0.1367	0.1372	0.1281	0.1255
6	50-59	0.1462	0.1460	0.1302	0.1316	0.1320	0.1233
7	60-69	0.1209	0.1331	0.1329	0.1186	0.1198	0.1202
8	70-79	0.1191	0.0979	0.1078	0.1076	0.0960	0.0970
9	80-89	0.0767	0.0735	0.0604	0.0665	0.0664	0.0593
10	90-99	0.0189	0.0242	0.0231	0.0190	0.0210	0.0209

Age Category	Age (Years)	2100	2110	2120	2130	2140	2150	2160
1	0-9	0.1168	0.1132	0.1109	0.1078	0.1046	0.1020	0.0993
2	10-19	0.1183	0.1145	0.1110	0.1087	0.1056	0.1025	0.1000
3	20-29	0.1193	0.1175	0.1137	0.1102	0.1079	0.1049	0.1018
4	30-39	0.1213	0.1177	0.1160	0.1122	0.1088	0.1065	0.1035
5	40-49	0.1247	0.1194	0.1159	0.1141	0.1105	0.1071	0.1048
6	50-59	0.1208	0.1201	0.1149	0.1115	0.1099	0.1063	0.1031
7	60-69	0.1123	0.1100	0.1094	0.1047	0.1016	0.1001	0.0968
8	70-79	0.0974	0.0910	0.0891	0.0885	0.0848	0.0822	0.0810
9	80-89	0.0599	0.0601	0.0561	0.0550	0.0547	0.0523	0.0508
10	90-99	0.0187	0.0189	0.0189	0.0177	0.0173	0.0172	0.0165

SOURCE: See text.

multiplying the 1980 estimate for the facility by the age distribution estimated for 2010. For example, if 1,000 people were simulated to be drinking the water near the facility in 1980, the estimate for 2010 would be 143.1 people in age category 1, 157.2 people in age category 2, etc., for a total of 1,184.5 people.

This population (divided into age categories) becomes the basis for estimating personal injury claims. For each age group, an estimate is made of the average claim per person which would be brought given that the individuals in the age group consider themselves to have been harmed by the off-site release. The average claim per person is then multiplied by the number of people in each age group. The costs for each age group are summed to produce an estimate of the total personal injury claim for the drinking water population.

To estimate the average claim per person in each age group, we divided the claims into four components:

- Lost time due to disability;
- Lost time due to mortality;
- Medical costs related to illness; and
- Medical monitoring costs.

The first three components (lost time due to illness, lost time due to mortality, and medical costs) are driven by the illness present in the age group. To estimate the harms caused by the off-site release, one could estimate the impact that exposure had on the presence of disease and illness. The personal injury caused by the release would be the lost time and medical costs of the extra cases of disease and disease-related deaths caused by the release.

This method, which is based on the incremental cases of disease, does not reflect the fact that the incremental cases caused by the release cannot be distinguished from the cases of the same or similar disease which would have occurred even in the absence of a release.[48] The people with diseases which would have occurred anyway (referred to as background cases of disease) will consider their diseases to have been caused by the release. Because it is not possible to determine whether an individual's disease was caused by the release (background cases and incremental cases are indistinguishable), all individuals with diseases that could be related to the release are potential claimants. Because background cases will exceed incremental cases by several magnitudes,[49] background cases become the primary factor to consider when estimating personal injury claims. Consequently, the costs of lost time due to illness and mortality and medical costs due to illness are based on estimates of background cases only.[50]

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[48] There are several exceptions to this. For example, a case of liver angiocarcinoma, if correctly diagnosed, would be almost unambiguously be associated with exposure to vinyl chloride.

[49] This will be true if exposures are in the range experienced to date as a consequence of the majority of releases at hazardous waste sites. Exceptions include situations involving direct contact and ingestion of high concentrations of hazardous substances over prolonged periods of time.

Choice of Diseases. To implement this method based on background cases of illness, a set of appropriate illnesses must be identified that will potentially lead to claims. The background incidence of the chosen illnesses forms the pool of potential claimants. Each individual with one of the illnesses may claim for lost time due to the disability caused by the illness and medical costs associated with treating the illness. Additionally, if an individual dies from one of the illnesses, his or her heirs may claim for the losses due to premature death. Clearly, the choice of illnesses will have a significant influence on the claims estimated using this background cases method. Each illness chosen must be potentially causable by exposure to hazardous substances. Additionally, once the illness is diagnosed, it must not be possible to prove that the cause of the illness was something other than the exposure to hazardous substances. The illnesses were identified by their three-digit International Classification of Diseases codes adapted for use in the United States (ICDA codes). The broad categories of the chosen diseases are listed in Exhibit A-32, along with their ICDA codes and the corresponding National Medical Care Utilization and Expenditure Survey (NMCUES) codes. As described below, the NMCUES data were used to estimate values for simulating potential claims associated with the selected illnesses.[51] Because these broad categories of diseases are potentially over inclusive, numerous diseases were eliminated at a more detailed level of identification, the four-digit ICDA code level. The illnesses excluded from the broad three-digit ICDA code categories are displayed in Exhibit A-33 along with their four-digit ICDA codes.

Of note is that these illnesses were chosen for purposes of assessing the claims that may arise under the PCLTF. Because the PCLTF accepts the

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[50] To estimate incremental cases, a risk assessment would be performed. This was not undertaken in this analysis because: (1) unavailable site-specific data are necessary to model human exposures with reasonable accuracy; (2) causal and behavioral models needed to predict incremental incidence from exposure are relatively primitive and very imprecise; and (3) such a complex analysis was beyond the resources available to this project.

[51] U.S. Department of Health and Human Services, National Center for Health Statistics, National Medical Care Utilization and Expenditure Survey, Washington, 1983. The data base contains detailed information about approximately 6,000 families (17,000 individuals). The respondents were interviewed five times over a period of fourteen months during 1980 and early 1981. They provided extensive information on their medical conditions, health insurance coverage, health care utilization, and expenditures. They also provided extensive demographic information on individual sources of income, ethnicity, age, sex, and employment status. The unique value of NMCUES lies in its compilation of data on illnesses suffered, health care charges incurred, and sources of payments for the health care changes.

EXHIBIT A-32

ILLNESSES USED TO ESTIMATE PERSONAL INJURY CLAIMS

NMCUES Condition	NMCUES Code	ICDA Code
Malignant neoplasm of lip, oral cavity and pharynx	08	140-149
Malignant neoplasm of digestive organs and peritoneum	09	150, 151, 153-155, 157-159
Malignant neoplasm of respiratory and intrathoracic organs	10	160-162, 171
Malignant neoplasm of bone, connective tissue, skin and breast	11	170, 172-174
Malignant neoplasm of genitourinary organs	12	180, 183-185, 187-189
Malignant neoplasm of other and unspecified sites	13	190, 191, 193, 195-199
Malignant neoplasm of lymphatic and haemopoietic tissue	14	200-202, 204, 205, 208
Benign neoplasm	15	211, 214-217, 219-223, 225, 226, 228, 229
Carcinoma in situ	16	230, 234
Other and unspecified neoplasm	17	235, 236, 238, 239, 600
Endocrine and metabolic diseases, immunity disorders	18	242-244, 246, 251-256, 258, 259, 270, 273, 275, 277, 279
Diseases of blood and blood-forming organs	20	280-282, 285-289
Mental disorders	21	298, 300, 301, 303, 306-309, 312-316, 390, 905
Diseases of the nervous system	22	331-337, 345-347, 349-358, 382
Disorders of the eye and adnexa	23	360, 364, 368, 370, 373, 377, 379, 437, 930, 117
Diseases of the ear and mastoid process	24	322, 384, 386-388
Diseases of pulmonary circulation and other forms of heart disease	28	415-417, 429, 459, 492
Diseases of the upper respiratory tract	31	472, 477, 478, 491, 493
Other diseases of the respiratory system	32	382, 388, 465, 496, 511, 515
Diseases of other parts of the digestive system	34	530, 535-537, 555, 556, 558, 562, 564, 570, 571, 573, 575-577, 596
Diseases of urinary systems	35	437, 581-586, 593, 596, 598, 599
Diseases of male genital organs	36	601, 602, 605, 606, 608
Diseases of female genital organs	37	620, 621, 623-626, 628, 629, 614-617
Abortion	38	632, 634, 637
Diseases of skin and subcutaneous tissue	42	692, 693, 695, 696, 698, 701, 702, 704-706, 709, 787, 995
Congenital anomalies	44	742-748, 750-753, 756, 757, 759
Certain conditions originating in the perinatal period	45	760-779
Signs, symptons and ill-defined conditions	46	780-791, 793, 795-799
Poisonings and other toxic effects	53	473, 987, 989

EXHIBIT A-33

FOUR-DIGIT ICDA CODES EXCLUDED FROM DISABILITY AND MEDICAL COST ANALYSIS

Illness	ICDA Code
Toxic diffuse goitre	242.0
Sickle-cell trait	282.5
Sickle-cell anemia	282.6
Acute posthaemorrhagic anemia	285.1
Lesion of ulnar nerve	254.2
Lesion of radial nerve, other	354.3, 354.8
Hordeolum and other deep inflammation of eyelid	373.1
Other infective dermatitis of eyelid	373.3
Nystagmus and other irregular eye movements	379.5
Otosclerosis involving oval window, nonobliterative	387.1
Simple chronic bronchitis	491.0
Oesophagitis	530.1
Ulcer of oesophagus	530.2
Alcoholic gastritis	535.3
Postgastric surgery syndromes	564.2
Vomiting following gastrointestinal surgery	564.3
Other digestive system postoperative functional disorders	564.4
Megacolon, other than hirschsprung's	564.7
Alcoholic fatty liver	571.0
Acute alcoholic hepatitis	571.1
Alcoholic cirrhosis of liver	571.2
Alcholic liver damage, unspecified	571.3
Acute cholecystitis	575.0
Hydrops of gallbladder	575.3
Perforation of gallbladder	575.4
Fistula of gallbladder	575.5
Cholesterolosis of gallbladder	575.6
Postcholecystectomy syndrome	576.0
Cholangitis	576.1
Perforation of bile duct	576.3
Fistula of bile duct	576.4
Acute pancreatitis	577.0
Acute prostatitis	601.0
Chronic prostatitis	601.1
Abscess of prostate	601.2
Prostatocystitis	601.3
Prostatitis in diseases classified elsewhere	601.4
Seminal vesiculitis	608.0
Spermatocele	608.1
Torsion of testis	608.2
Other inflammatory disorders of male genital organs	608.4
Stricture or atresia of vagina	623.2
Tight hymenal ring	623.3
Old vaginal laceration	623.4

EXHIBIT A-33 (continued)

FOUR-DIGIT ICDA CODES EXCLUDED FROM DISABILITY AND MEDICAL COST ANALYSIS

Illness	ICDA Code
Vaginal haematoma	623.6
Polyp of vagina	623.7
Hypertrophy of clitoris	624.2
Hypertrophy of labia	624.3
Old laceration of scarring vulva	624.4
Maematoma of vulva	624.5
Polyp of labia and vulva	624.6
Excessive or frequent menstruation	626.2
Puberty bleeding	626.3
Postcoital bleeding	626.7
Associated with anovulation	628.0
Of pituitary-hypothalamic origin	628.1
Of tubal origin	628.2
Of uterine origin	628.3
Of cervical or vaginal origin	628.4
Acute salpingitis and oophoritis	614.0
Lupus erythematosus	695.4
Lichenification and lichensimplex chronicus	698.3
Unspecified	698.9
Prickly heat	705.1
Coma and stupor	780.0
Syncope and collapse	780.2
Hyperhidrosis	780.8
Other general symptoms	780.9
Functional and undiagnosed cardiac murmurs	785.2
Other abnormal heart sounds	785.3
Gangrene	785.4
Shock without mention of trauma	785.5
Venom poisoning	789.5
Abnormal glucose tolerance-test	790.2
Excessive blood level of alcohol	790.3
Bacteraemia, unspecified	790.7
Viraemia, unspecified	790.8
Nonspecific reaction to tuberculin test	795.5
False positive serological test for syphilis	795.6

liability of owner/operators established under CERCLA or any other state or federal law, the illness categories are fairly broad. A program designed specifically to compensate individuals harmed due to exposure to uncontrolled releases of hazardous substances may be designed more narrowly. Fewer illnesses may be designated as eligible for compensation. Also, diagnostic criteria for those illnesses may be established to help ensure that only those individuals who were harmed are compensated. These measures would narrow the applicability of the program, and would, if successfully implemented, result in expenditures less than the claims estimated with the background cases method used here.

Several types of claims might arise under the PCLTF. For this study, individuals who have been harmed due to one of the selected illnesses are simulated to seek compensation for the following losses, as applicable:

- time lost due to disability;
- time lost due to premature death;
- medical charges; and
- medical monitoring charges.

Each is discussed below.

Time Lost Due to Disability. Individuals who suffer from one of the selected diseases may become temporarily or permanently disabled, resulting in lost work days, lost time for homemaking, lost leisure time, or reduced enjoyment of leisure. The amount that people would claim for these losses (in dollars) is uncertain. Clearly, the severity and duration of the disability are important factors. Individuals fully disabled for extended periods of time would be expected to claim for larger amounts than individuals partially disabled for short periods.

Ideally, to simulate claims we would like to estimate the value that disabled individuals place on the time lost due to their disability. This value would be the amount of money necessary to make the individual "whole;" i.e., the amount needed to return the individual to his or her pre-disability condition. When the disability is irreversible, there is no amount of money capable of making the individual whole in the physical sense. Consequently, "wholeness" must be interpreted more broadly so that an appropriate level of compensation may be established.

There is no established procedure for evaluating the total compensation (in dollars) suitable for various disabilities. Every individual will have his or her own unique circumstances that would affect compensation levels. As a lower bound, we focused on one fairly uncontroversial component of losses due to disability: lost wages. Currently there are several government programs that routinely compensate disabled individuals a portion of their pre-disability wages (e.g., workers' compensation programs and the social security disability program). Therefore, for purposes of simulating claims, the amount of wages lost due to disability was used.

To estimate lost wages we first estimated lost work days from the NMCUES data. These data include information on lost work days by ICDA code and by age category for individuals age 14 and older. The following procedure was used to estimate work days lost per day per person due to one of the selected illnesses:

Step 1: We calculated the total lost work days for the entire population (over age 14) by counting all lost work days reported in the survey that listed a chosen disease as the condition causing the lost work days.

Step 2: The distribution of the total lost workdays across the age categories was estimated using the broad classifications of diseases.[52]

Step 3: The percentages of lost workdays by age from step two were multiplied by the aggregate lost workdays of step one to estimate lost work days by age.

Step 4: For each age group, the results from step three, lost work days by age, were divided by the employed population for that age group in 1980.[53] This yielded an estimate of lost work days per person in 1980.

Exhibit A-34 displays the estimated average number of lost work days per person associated with the chosen diseases by age category.

To value one day of lost work we used one-fifth of the median weekly wage per person by age, shown in Exhibit A-34.[54] To simulate claims we applied these estimates of lost work days and wages to all persons exposed to the hazardous wastes, not just those who had been working before the illness occurred. This will overstate wage losses due to these illnesses. However, it reflects the claims that may be brought by individuals who do not work for wages (e.g., those who work inside the home). Consequently, because these individuals would be affected by these diseases in the same manner as those

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[52] It was not possible to estimate the distribution of lost work days across the age categories after screening out the four-digit ICDA code illnesses in Exhibit A-33. Consequently, the distribution by age is based on a broader definition of diseases than is the total number of lost work days.

[53] 1980 employed population figures taken from U.S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings, January 1981.

[54] 1982 median weekly earnings for full time wage and salary workers, Unpublished Bureau of Labor Statistics data.

EXHIBIT A-34

DATA USED TO ESTIMATE PERSONAL INJURY CLAIMS 1/

AGE	Work Loss Days (per person, per year)	Value per Work Loss Day (1982 $)	Fraction of Deaths Due to Relevant Diseases	Remaining Years of Life	Medical Costs (per person, per year) (1982 $)	Medical Monitoring Costs (per person, per year) (1982 $)
0-9	0.0	0	.7796	70	145	160
10-19	0.55	13	.1867	61	82	160
20-29	1.22	55	.1705	51	142	160
30-39	0.95	68	.3089	42	226	160
40-49	1.20	71	.4228	33	240	160
50-59	1.76	69	.4805	24	378	160
60-69	2.17	65	.4685	17	686	160
70-79	0	0	.4121	11	1,139	160
80-89	0	0	.3569	3	1,140	160
90-99	0	0	.2764	0	767	160

1/ For sources, see text.

people in the workforce, this method provides a reasonable estimate of this component of the claims.[55]

In simulating future claims, we must recognize that real wage rates are projected to increase over time. To account for the changes in wage over time, the median wages shown in Exhibit A-34 are increased using rates based on economic projections of real wages over time.[56]

Time Lost Due to Premature Death. Some individuals may die from one of the selected illnesses. Survivors may submit a claim for compensation for the death. In estimating the value of such a claim, we did not attempt to value a life. Rather, our objective was to estimate the likely value of a successful claim. As is the case with disability, no amount of money can compensate for the premature death of an individual. Again, as a lower bound, we focused on the lost potential wages due to the individual's premature death. Clearly, this loss is only one of the losses resulting from the death.

To estimate these lost wages, we first estimated the fraction of all deaths caused by the diseases of interest. These estimates, also shown in Exhibit A-34, were made for each age group; for example, 17.05 percent of all deaths of individuals between 20 and 29 were due to one of the diseases shown in Exhibit A-32. These values were estimated by: (1) calculating the number of deaths in each age category using the ICDA codes for the selected illnesses; and (2) dividing the number of deaths due to selected diseases by the total number of deaths in the given age category.[57]

The number of premature deaths caused by the chosen diseases is simulated by multiplying the percentages of deaths due to selected diseases by the death rates found in Exhibit A-30. For example, if 17.05 percent of all deaths of individuals between 20 and 29 are due to one of the selected diseases, and if

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[55] The economists' appropriate measure of such costs is consumer surplus, an extremely difficult concept to implement. We use the methods discussed here because they are most likely to be used in the process of actually assigning loss.

[56] Projected increases in real-wages are taken from House Document 98-199, 1984 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund, Scenario II-B, 98th Congress, 2nd session, 1984. An average annual increase of 1.15 percent is used for the first ten years; 1.5 percent per year is used for the next ninety years (which is the long-term projected rate of increase); and the rate is zero thereafter.

[57] U.S. Department of Human Health and Services, National Center for Health Statistics, Vital Statistics of the United States, 1979, Volume II - Mortality, Table 1-25, 1984. NMCUES data do not report mortality rates. Because of the need to use a data source other than NMCUES, the ICDA codes used to estimate mortality rates are not identical to those used to estimate medical costs and work loss days. However, the variation in use of codes is believed to have a negligible effect on the estimated death rates.

1.29 percent of the people in this age group do not survive to the next age group (30 to 39) then: .1705 x .0129 = .0022 of the population aged 20 to 29 is estimated to die from one of the selected diseases in any given decade. The time lost as the result of these deaths is estimated as the expected years of life remaining for each age category, as shown in Exhibit A-34.[58]

The above procedure produces an estimate of years of life lost as the result of the premature deaths caused by the background cases of the chosen diseases. To simulate claims, the loss per year is valued at 52 times the median weekly wage for each age group (the wage data used for the disability claims are also used here, see above). For example, an individual who dies at age 30 (and thus has an expected remaining life of 42 years) receives 10 years of compensation at the rate of $68 per work day, ten years at $71, ten years at $69, ten years at $65, and 2 years at zero compensation. In simulating claims, these values are also increased as appropriate to reflect projected increases in real wage rates. These values clearly underestimate the actual costs of premature deaths. However, they are reasonable lower bounds to potential claims.

Medical Costs Related to Selected Illnesses. A major source of claims under the PCLTF could be reimbursement for medical costs associated with the selected illnesses. To estimate annual per capita medical costs, we began with an estimate of total medical charges in 1980, developed from the NMCUES data. We used a process similar to the process used to estimate lost work days, with an additional step.

Step 1: Medical charges were estimated for the entire population for the selected conditions listed in Exhibit A-32 (and screened for those in Exhibit A-33).

Step 2: The charges estimated in step 1 were adjusted upwards to account for undercounting of government charges for certain illnesses.[59] This undercounting of government charges occurred for a number of reasons; for example, many individuals in the NMCUES survey were unaware of the extent of the Medicare and Medicaid costs of their illnesses.

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[58] For the ages up to 79 the following publication was used to computed expected remaining life: U.S. Department of Health and Human Services, National Center for Health Statistics, Vital Statistics of the United States, 1979, Volume II - Mortality, Table 6-3, 1984. For age categories 80-89 and over 90 the death rates (found in Exhibit A-30) were used to estimate remaining life.

[59] Upwards adjustments based on ICF analysis of NMCUES data and estimates prepared by Dr. Thomas Hodgson of the National Center for Health Statistics, based on National Health Accounts data, compiled by the Health Care Financing Administration.

This procedure produced an adjusted estimate of the total aggregate medical charges for the entire population.

Step 3: The distribution of medical charges across the age categories was estimated using the broad classification of diseases.[60]

Step 4: The percentage of charges by age from step 3 were multiplied by the total charges of step 2 to estimate total medical charges by age.

Step 5: In each age group, the total medical charges were divided by 1980 population figures for that age group to calculate per capita medical charges by age group.[61]

These five steps produce estimates of medical charges in 1980 (the year of the NMCUES Survey). Because the PCLTF Model is based on 1982 dollars, the NMCUES charges were adjusted to reflect 1982 dollars and 1982 health care expenditures.[62]

In simulating future medical cost claims we must recognize that health care costs and expenditures do not remain constant in real terms. Historically, the prices for health care services have increased more rapidly than the prices of goods in general. Also, health care expenditures have increased as the age mix of the population changed and as the intensity in the use of health care services has increased. Potential future changes in the age mix of the population are simulated using the population dynamics matrix (see Exhibit A-31). However, changes in prices and intensity had to be incorporated.

"Intensity" is the amount of medical services used to treat given conditions. It is believed that intensity has historically increased at a rate of approximately one percent per year, and is projected to continue to increase at the same rate.[63] The model thus allows for a one percent increase in intensity each year. Increases in real prices for medical services likewise contribute to growing medical charges over time. Prices for medical services have historically risen an average of 1.1 percent per year faster than inflation.[64] This figure is used as the long-term projected increase in medical costs (i.e., from year 41 to year 100). The annual increases in prices for medical services are projected to vary in the near term, beginning at 2.0 percent and falling to 1.3 percent by model year 31.[65] After year 100, we assume a zero percent real increase in prices.

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[60] It was not possible to estimate the distribution of medical charges by the age categories after screening out the four-digit ICDA code illnesses in Exhibit A-33. Consequently, the distribution by age is based on a broader definition of diseases than is the estimate of the total medical charges.

[61] Resident population of the United States by age as of 4/1/80, taken from "Estimates of the Population of the United States, By Age, Sex, and Race: 1980-1982," Current Population Reports, Population Estimates and Projection Series P-25, No. 929, May 1983, Table 4, pp. 22-23.

[62] Adjustments based on data from Statistical Abstract of the United States, 1984 edition, p. 103. Health care expenditures increased 30.77 percent from 1980 to 1982, taking into account population growth, changes in intensity of use, and changes in price. We assumed that the costs in all age categories increased at the same rate.

Medical Monitoring. The final component of the personal injury claim is medical monitoring costs. The purpose of this monitoring is to keep watch on a person's health over time to determine if the person contracts a disease due to exposure to the environmental pollutants. Symptoms may or may not exist, and consequently, an examination must be performed which includes non-routine tests and x-rays, such as tests of liver and kidney functions and chest x-rays.

The inclusion of the monitoring costs in our analysis of personal injury claims is warranted because:

- past settlements for harms due to occupational exposure to toxic substances have included medical monitoring costs; and

- claims currently pending for harms due to exposure to environmental pollutants include medical monitoring.

Consequently, it is likely that these costs will be claimed by people who consider themselves to have been put at risk by their exposure to the off-site release. Of note is that this monitoring is provided for all individuals, not just those with evidence of illness.

The cost of medical monitoring is likely to range from $70 to $250 per person per year. The lower estimate is for a routine exam in a clinic (which is the type of exam often provided by employers to their employees who work with toxic substances). The higher estimate reflects the total cost of tests and examination by a private physician in an urban area. The average of these two estimates, $160, was used (see Exhibit A-34).

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[63] House Document 98-199, 1984 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund, Scenario II-B, 1984, p. 53.

[64] Based on a comparison of the Consumer Price Index (CPI) and the Medical Care Price Index for 1940 to 1983. See Economic Report of the President, 1984, p. 279.

[65] House Document 98-199, op. cit., p. 53.

Using the costs displayed in Exhibit A-34 and the population over time displayed in Exhibit A-31, the total personal injury claim was computed using the following assumptions:

- personal injury claims are requested as lump sum payments by all individuals who believe themselves to have been harmed;
- the lump sum payments reflect the future expected costs for each individual for the remainder of his life;
- only 75 percent of those eligible for medical monitoring make claims; and
- the lump sum payment is computed by taking the net present value of costs anticipated in the future.

For example, to estimate the personal injury claims from an off-site release in 2010, the following calculations are performed:

- Identify the drinking water population in 1980 (this is a facility-level attribute, assume 1,000 people for this example).
- Calculate the number of people in each age group in 2010. For example, from Exhibit A-31, there are 1,000 x 0.1678 = 167.8 people in age group 5 in 2010.
- Calculate the stream of direct medical costs, the value of lost time due to disability and premature death, and medical monitoring costs for each age group over time.
- Discount the cost streams for each age group to a net present value using the real discount rate employed in the Model.
- Sum the net present values for each age group to estimate the total personal injury claim.

Although the approach used here produces reasonable estimates of potential personal injury claims, there are still a variety of data problems and uncertainties. In particular, the simulation of the number of people who consider themselves to have been exposed is based on very limited data from site surveys and the drinking water survey. No adjustments are made for changes in water usage near facilities over time. Additionally, several of the estimates of direct medical costs are based on gross disease categories and are very uncertain. The background incidence of disease and the costs of diseases are not adjusted over time. Finally, cost components for pain and suffering are not included. Claims for pain and suffering may be large, and if they are awarded, the estimates reported here may be too low.

A.2.5.2 Real Property Damage Claims

Real property damage claims may include the following:

- diminished market value;
- impaired use or interrupted enjoyment;
- destruction or contamination; and
- restoration of property.

Diminished market values may result from any detected gradual release to groundwater, on site or off site. On-site releases may cause reductions in surrounding property values because people may perceive some increased risk presented by the site. This proposition is somewhat speculative and we have not identified any documented cases of reductions in property value caused solely by on-site releases. Therefore, for the current simulations, we do not model real property damages due to on-site releases.

Off-site releases may reduce the value of property near the site. If the release comes in contact with people's property, the costs of restoring the property to its original condition could fall under the category of real property damage claims. In the development of the PCLTF Simulation Model, we did not estimate this type of real property damage because it is too site specific to be considered in our general approach and may be unlikely to occur as the result of the releases into groundwater considered in the Model. Also excluded was consideration of damages to groundwater that is not currently used as a water supply. (This unused groundwater can be considered to be real property.) The costs of replacing contaminated groundwater which was in use are included under economic loss claims described below. The exclusion of damages to groundwater currently not in use biases our results downward. Additional research may be useful for estimating the importance of this bias.

The real property damage caused by off-site releases is limited to a simulated reduction in property value. Conceptually, one could envision that all the property within a given distance of a site which is found to be releasing hazardous waste off site may be affected. Within this given distance, property values may drop by an average of some percent relative to what they were prior to the discovery of the off-site release. The actual percentage reduction will be a function of the perceived risk of the release. A catastrophic release could result in permanent evacuation with property values going to zero (e.g., the inner rings at the abandoned Love Canal). A less serious release could cause very modest (and perhaps temporary) changes in market values. Based on this general understanding that off-site releases affect property values, the parameters necessary to model this phenomenon are as follows:

- distance from the site that is affected;

- pre-release property values;

- type of off-site release (i.e., toxic or detectable);

- whether property values are affected by the releases; and
- percentage by which property values fall due to the discovery of the release for both types of off-site releases.

Each of these parameters is discussed below in turn.

Any property closer to the site than the place where the release is detected is likely to experience some decline in property values. Additionally, some properties farther away from the site than the detection point may also be affected. For off-site releases, we assume the affected area to be within one-and-one-half times the distance to the point of detection. (The distance to the point of detection is the distance discussed in Section A.2.3, Modeling of Releases.)

Clearly, the choice of one-and-one-half times the distance to the point of detection of off-site releases is somewhat speculative. Additional research would be useful to identify more precisely the expected market reaction to information regarding a release of hazardous waste. Nevertheless, the value is reasonable in that it is greater than one (which could be considered a lower bound), is not excessively large (the size of the area increases faster than the distance chosen to define the area),[66] and utilizes the distance to the potable well which is assumed to be the point of discovery.

The pre-release property values are required as a base from which to estimate the reduction in property values. The County and City Data Book, 1977 (Data Book)[67] was used to obtain median housing values and average farm values (per acre) on a county basis for the entire country. Additionally, the Data Book reports the percentage of area in each county that is farmland. Assuming that the county is homogeneous, the value of any given area can be computed as:

Value per unit area = (1.0-farm percentage)(housing density per unit area)(housing value) + (farm percentage)(farm value per unit area).

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[66] The size of the affected area increases more than twice as fast as the radius chosen to define the area. Therefore, a small increase in the radial distance can mean a much larger area. Algebraically this can be shown as follows: let initial radius = R; initial area = πR^2; increase in radius = ΔR; and increase in area = $\pi(R+\Delta R)^2-\pi R^2 = \pi(2R\Delta R+\Delta R^2)$.

The proportional increase in the radius is $\Delta R/R$. The proportional increase in the area is more than twice as large and is equal to $\pi(2R\Delta R+\Delta R^2)/\pi R^2 = 2\Delta R/R+(\Delta R/R)^2$.

[67] County and City Data Book, 1977 and Data Book, A Statistical Abstract Supplement, U.S. Department of Commerce, 1977.

This valuation technique omits several important considerations:

- counties are not homogeneous;
- commercial or industrial facilities will be within many affected areas; and
- land values near the site may be well below the county median and average, possibly as a consequence of the site being there, or possibly the low land values were an impetus for locating the site there initially.

Additional parameters describing the initial housing and farmland values relative to the county median and average were used to provide a partial correction for these considerations. For the current simulations, we assumed that housing and farmland values near facilities will each be 50 percent of the county-wide values.[68] Although this does not incorporate industrial or commercial facilities, it does recognize the fact that land near a facility is likely to be of lower value than the average price of land in a county. If the industrial use of land is not severely restricted by the discovery of an off-site release (e.g., the industry itself may be the owner of the site, and it may utilize numerous hazardous substances), then the omission of industrial facilities may not introduce a significant bias in our estimates.

The percentages by which property values fall due to the discovery of on-site and off-site releases are crucial parameters about which we have uncovered very little data. Toxic constituents off site are assumed to cause an average of a 30 percent decline in the pre-release value of the property surrounding the site. Detectable constituents off site are assumed to cause an average of a 15 percent decline in the pre-release value of the property surrounding the site. The assumptions of 15 and 30 percent, although highly speculative, were chosen to indicate that while the land need not lose all of its value, a substantial reduction is possible. The reductions in property values need not be uniform within the affected area. The percentage of value reduction is meant to represent an average for the affected area.

Finally, the frequency with which property values are affected by releases may be specified. The frequency of real property damage resulting from off-site releases is set to 1.0, meaning that each release off-site results in the reductions in property values outlined above. Exhibit A-35 summarizes the values used to calculate real property damages.

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[68] Different fractions may be chosen for housing and farm values. The choice of 50 percent is speculative; additional research would be valuable in refining this assumption.

EXHIBIT A-35

SUMMARY OF ASSUMED PARAMETERS USED TO ESTIMATE REAL PROPERTY DAMAGES

Initial housing values near the site expressed as fraction of median county values (0-1)	0.50
Initial farmland values near the site expressed as a fraction of average county values (0-1)	0.50
Fraction of property value lost due to detectable release off site	0.15
Fraction of property value lost due to detectable and toxic release off site	0.30
Frequency of real property claims due to detectable release off site	1.00
Frequency of real property claims due to detectable and toxic release off site	1.00

The real property claim is calculated using the following three equations:

$$\text{VALUE1} = (1.0 - \text{FARMPT}) \times \text{HOSDEN} \times \text{MEDHOS} \times \text{HOSVAL} \qquad (1)$$

where:
FARMPT = percentage of land within county which is farmland

HOSDEN = housing density per unit area within county

MEDHOS = median value of houses within county

HOSVAL = housing values near the site expressed as a fraction of the county median (assumed to be 0.5)

$$\text{VALUE2} = \text{FARMPT} \times \text{MEDFAR} \times \text{FARVAL} \qquad (2)$$

where:
FARMPT = percentage of land within county which is farmland

MEDFAR = average farm value per unit area

FARVAL = farm values near site expressed as a fraction of the county average (assumed to be 0.5)

$$\text{Real Property claim} = \text{RPDEV} \times \text{AREA} \times (\text{VALUE1} + \text{VALUE2}) \qquad (3)$$

where:
RPDEV = property devaluation due to release off site (assumed to be 0.15 for detectable releases off site and 0.30 for toxic releases off site).

AREA = affected area as defined above.[63]

A.2.5.3 Economic Loss Claims

Economic loss claims may include lost productive capacity of income-producing property and the replacement of a contaminated water supply. We have concentrated only on the water supply component of economic loss claims because it is the only aspect about which data are available. Consequently, the estimates developed may be biased downward.

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[63] Affected area is in the shape of a "doughnut," with the circumference defining the boundary of the affected property and the hole being the facility. The facility size is adjusted by 15 percent to account for the area between processes and administrative buildings.

The capital and O&M costs of providing an alternate supply of water are presented in Exhibit A-36. These costs were developed based on the following assumptions:[70]

- Tapping a new source would require a raw water transmission main of between 5 and 10 miles, with an average of 7.5 miles.
- Alternative water source meets all drinking water standards.
- Costs associated with acquiring new land or easements for the transmission main are not included due to the site-specific nature of these costs; however, these costs could be considerable.
- The existing treatment and distribution facilities would be used with the new source without major operating changes.
- For surface water sources:
    - -- Raw water intake facilities would be installed.
    - -- Raw water low-lift pumping at a total dynamic head of 50 feet (average) would be required.
- For groundwater sources:
    - -- New wells at a maximum capacity of 1 mgd each would be installed.
    - -- The costs of a geologic study were not included because of the site-specific nature of these studies; however, these costs could be considerable.

We assumed that individuals will not be compensated for O&M costs, so that the capital costs displayed in the exhibit are used as the estimate of the economic loss claim. The drinking water population simulated at the facility level in 1980 and adjusted for changes in population over time (see personal injury claims) was used to estimate the size of the water supply required.

A.2.5.4 Natural Resource Damage Claims

Natural resource claims may include compensation for the destruction of publicly-owned groundwater, surface water, natural resources, and recreation

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[70] U.S. Environmental Protection Agency, Technology and Costs for the Removal of Fluoride from Potable Water Supplies, Final Draft, July 1983, pp. 58-59.

EXHIBIT A-36

COSTS OF ALTERNATIVE WATER SUPPLY
(thousands of 1982 dollars)

Population Served	Capital Costs	O&M Costs
50-99	300.0	9.3
100-499	360.0	11.2
500-999	540.0	17.9
1,000-2,499	910.0	34.1
2,500-4,999	1,585.0	52.8
5,000-9,000	2,120.0	87.1
10,000-99,999	9,135.0	269.0
100,000-999,999	45,265.0	1,760.0
greater than 1,000,000	292,115.0	15,900.0

SOURCE: U.S. Environmental Protection Agency, Technologies and Costs for the Removal of Fluoride from Potable Water Supplies, Final Draft, July, 1983, pp. 58-78.

areas.[71] These costs will be highly site specific, depending on the proximity of the release to areas controlled or owned by states or the federal government.

The largest costs in this category would likely be the costs of cleaning up contaminated groundwater outside the property boundaries of the facility. These costs could be considered to be natural resource damages because groundwater is a natural resource and in most states, the use of groundwater is controlled by the state. Consequently, the state could request that response actions be taken to restore this resource.

In developing the Model, we assumed that groundwater cleanup actions would be required even if the state did not request them. Other parties could require that these actions be initiated (e.g., EPA, property owners) so it was assumed that these actions would be undertaken as a response to the detection of off-site releases. Their costs are counted under the category of response costs, and including them again under natural resource damages would be double counting. Therefore, the natural resource damages do not include the costs of cleaning up groundwater.

Similarly, the costs of providing an alternative water supply are not counted here because they are included in economic loss claims. Therefore, natural resource damages are limited to the following three components:

- cost of restoring areas of contaminated surface water;
- value of lost recreation; and
- cost of fish kills.

To estimate the costs of restoring areas of contaminated surface water, we assumed that the primary cost would be the dredging and disposing of the contaminated material in the river bed or lake bottom. Dredging and disposal costs[72] are as follows:

• Removal of contaminated river bed or lake bottom (less than 40-50 feet deep)	$3.00 per cubic yard

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[71] CERCLA section 111(b): "... claims resulting from a release or threat of release of a hazardous substance ... may be asserted against the Fund under this title for injury to, or destruction or loss of, natural resources, including cost for damage assessment: Provided, however, that any such claim may be asserted only by the President, as trustee, for natural resources over which the United States has sovereign rights, ..., or by any State for natural resources within the boundary of that State belonging to, managed by, controlled by, or appertaining to the State."

[72] Personal communication with Army Corps of Engineers.

- Transport costs of contaminated water to a land disposal facility	$55.00 per cubic meter ($42.00 per cubic yard)
- Disposal costs of contaminated material	$100.00 per cubic meter ($76.50 per cubic yard)

Using these values, we assumed the contaminated area would be on the order of one acre and that the bottom material would have to be dredged to a depth of 3 feet. The cost of dredging is therefore estimated as:

cost = (4,840 cubic yards of material) x (3.00 + 42.00 + 76.50 dollars per cubic yard),

or approximately $588,000. This estimate is clearly speculative because the size of the area is assumed to be one acre. If the area is larger, or if more activities would be performed, this cost would be much higher.

Estimates of the value of recreation include:[73]

- General recreation: $1.60 to $4.80 per person per day (1982 dollars).
- Specialized recreation: $6.50 to $19.00 per person per day (1982 dollars).

Using the median value of $3.20 per day for general recreation, we estimated the recreational loss per release using the following assumptions:

- affected area will be unusable for a year;
- the area would have been used by 50 people per weekend; and
- weekend use accounts for half of total use.

Using the above assumptions, we calculated recreational loss as follows: (50 people/weekend) x (52 weekends/year) x 2 (to reflect use during the week) = 5,200 person days. Multiplying the number of person days by $3.20 yields $16,640 (1982 dollars).

Although this number is very small, one must recognize that the recreation loss as the result of the types of releases considered in the Model is likely to be very localized. Because the affected area is likely to be small, it is likely that there will be numerous substitute recreation areas available at little or no incremental cost to the user. The value of the lost recreation could therefore be very small.

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[73] Ibid.

The cost of fish kills was estimated by investigating past cases where surface water areas of less than an acre were affected. Exhibit A-37 presents the cases on which we based our analysis. Based on these cases, we assumed 3,000 fish would be killed per release into surface water. Given that the value per fish is generally below $1.00,[74] we assumed a value of $0.50. Therefore, the fish kill component of the natural resource damage is $1,500.

The total natural resource damage per off-site release is assumed to be the sum of the three estimates ($588,000 + $16,640 + $1,500) or approximately $606,000. This value is used in the Simulation 1 run of the Model.

As is clearly evident from the above discussion, the natural resource damage estimate is based on speculative assumptions. Additional research may yield improved estimates of the likely range of these costs.

A.2.6 Funding Sources

The potential funding sources available to cover the costs of actions and claims are the owner/operators, PCLTF, Superfund, and state funds. Below, we describe each funding source. The manner in which costs are allocated to the funding sources is discussed in section A.3.4, Cost Allocation Policy.

Owner/Operator

For the owner/operator to be available as a funding source, one of the following two conditions must be met:

- the owner/operator has an active financial assurance mechanism (such as insurance or a trust fund) dedicated to covering the type of cost being allocated; or
- the owner/operator is still in business and consequently pays the cost of the action or claim.

These characteristics are simulated in the facility-level characterization (see section A.2.2). It should be noted that financial assurance is currently only required for routine monitoring and care during the post-closure period. Consequently, most costs would not be covered by a financial assurance mechanism, and owner/operators must remain in business in order to cover costs.

PCLTF

The PCLTF will cover costs at a facility only if the facility is qualified for PCLTF coverage. Under the current PCLTF statute, the Fund will cover all costs for actions and claims following the end of the post-closure period. Prior to this point, only third-party claims are covered at qualified facilities.

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[74] American Fisheries Society, "Monetary Values of Freshwater Fish and Fish-Kill Counting Guidelines," Publication No. 13 (155N00097-0638), 1982.

EXHIBIT A-37

DATA ON FISH KILLS

Cause	# of Cases	# of Fish Killed	Average Kill/Case
Pesticides	9	38,068	4,229
Fertilizers	4	15,554	3,888
Manure Drainage	2	3,200	1,600
Food	1	150	150
Chemicals	4	7,862	1,968
Petroleum	3	2,269	756
Metals	2	9,050	4,525
Other	1	100	100
TOTAL	26	76,263	2,933

SOURCE: U.S. EPA, "Fish Kills Caused by Pollution in 1976."

Superfund

The Superfund may be specified as a funding source for action and claims costs. In current simulations, Superfund is designated to cover non-routine response costs which are not covered by owner/operators at facilities not covered by the PCLTF. Additionally, the Superfund may cover the costs of natural resource damages.

State Funds

The availability of state funds to cover costs for actions and claims is modeled using two sets of prototype state coverage regimes. One set of regimes describes state coverage for claims and response actions. The second describes its coverage for monitoring and post-closure care actions. Each is discussed below.

State Coverage Regimes for Third-Party Claims and Response Costs. For facilities that qualify to transfer their liability to the PCLTF, the PCLTF assumes the costs of legally valid claims and response actions. If a facility does not qualify to transfer its liability to the PCLTF, then a state fund might be available to pay for certain or all of these two types of costs. To estimate the likelihood that such state funds will be available, the laws of all 50 states, plus the District of Columbia, Puerto Rico, and the Virgin Islands, were surveyed from the following sources:

- Peter Guerrero and David Colbert, "State Post Closure Approaches," Office of Solid Waste, U.S. Environmental Protection Agency, May 10, 1982;
- ICF Incorporated, Review of State Liability Provisions, op. cit.;
- ICF Incorporated, Review of State Closure and Post-Closure Financial Assurance Provisions, report to U.S. Environmental Protection Agency, June 1982; and
- G. Cohen and D. Derkics, "Financial Responsibility for Hazardous Waste Sites," 9 Capital University Law Review 509, 1980.

From this review, we developed six state coverage regimes for third-party claims and response actions (see Exhibit A-37). The regimes divide third-party damage claims into personal injuries and other damages.

The research revealed that most states do not have a fund that covers third-party damages or response actions (Regime 1). Slightly less than one-fourth of the states were found to have a fund that would cover response actions only (Regime 2). Only three states covered any third-party claims: one state covered all third-party damage claims, but not response costs (Regime 6), and two states had a fund that covered response costs and third-party claims for damages other than personal injuries (Regime 3). Exhibit A-38 displays the resulting frequencies for each state coverage regime. These

EXHIBIT A-38

STATE COVERAGE REGIMES FOR THIRD-PARTY CLAIMS AND RESPONSE COSTS

Damage/Response Cost Coverage Regime	Coverage	Frequency
1.	No funding for third-party claims or response actions	0.71
2.	Funding for response actions only (when federal funds and the owner/operator do not pay)	0.23
3.	Funding for response actions and third-party claims other than personal injury	0.04
4.	Funding for all response actions and third-party claims	0.00
5.	Funding for third-party claims other than personal injury	0.00
6.	Funding for all third-party claims	0.02

SOURCE: ICF Incorporated estimates.

frequencies were used to probabilistically assign the regimes to the states in each iteration of a Model run. The potential for new state funds being established over time was not examined.

State Coverage Regimes for Routine Monitoring Actions and Post-Closure Care. Several states have instituted mechanisms for using state funds to pay for monitoring and post-closure care under certain conditions at closed hazardous waste sites. Based on a survey of state post-closure provisions as of June 1, 1982:[75]

- 41 states have no provisions for covering monitoring and post-closure care costs; and
- 12 states have provisions authorizing the use of state funds for monitoring and post-closure care costs under certain conditions. Of the 12 states with such provisions, 2 would provide funds even if federal funds were available, 2 would not, and the outcome is unclear for the remaining 8.

Based on these figures, we structured three state monitoring and post-closure care regimes, as shown in Exhibit A-39. Each state is probabilistically assigned a state coverage regime using the frequency shown in the exhibit.

A.3 RELATIONSHIPS AMONG THE BASIC MODEL UNITS

This section presents the major relationships incorporated into the Post-Closure Liability Trust Fund Simulation Model. The term relationship is used here to describe the manner in which two or more factors are simulated to interact. For example, Fund expenditures and revenues jointly determine the Fund balance. Consequently, there is a relationship among these three quantities (expenditures, revenues, and balance). This section describes how this and other relationships are modeled.

This section is organized as follows:

- Economic Relationships:
  - Relationship between the demand for land disposal capacity and the facility population. The method used to simulate the demand for land disposal capacity is presented. The manner in which facilities are added to achieve a balance between supply and demand is described.
  - Relationship among Fund expenditures, Fund revenues, and Fund balance. Expenditures and revenues jointly determine the

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[75] ICF Incorporated, Review of State Closure and Post-Closure Financial Assurance Provisions, op. cit.

EXHIBIT A-39

STATE MONITORING AND POST-CLOSURE CARE REGIMES

State Coverage Regime	Monitoring and Post-Closure Care Coverage	Frequency of Occurrence
1	None	0.78
2	That portion not covered by PCLTF	0.11
3	100%	0.11

SOURCE: ICF Incorporated estimates.

balance. Also, the (unobligated) balance influences the tax revenues received by the Fund. The interaction of these quantities and the roles of inflation and interest rates are described.

- Regulatory Policy:
  - -- Permit policy. EPA's assumed permit policy and its impact on the facility population is described.
  - -- Action policy. The action policy identifies the relationship between the detection of releases and the undertaking of actions. The method used to define and simulate this relationship is described.
- Financial Relationships. The relationships among owner/operator financial characteristics, owner/operator expenditures, and the likelihood of owner/operator bankruptcy are described.
- Cost Allocation Policy:
  - -- Qualification policy. The relationship between the qualification status of a facility (i.e., whether the facility qualifies for PCLTF coverage) and the facility's characteristics is defined in terms of a qualification policy.
  - -- Relationship between funding sources, costs, and facilities. The allocation of costs among the available funding sources depends on the cost type and the facility's characteristics. The procedure used to define the relationships is presented.
- The Effect of Response Actions on Releases. The relationship between response actions and releases is presented.
- Legal Validity of Claims. The relationship between claims which are brought by third parties and the claims for which compensation may be obtained is described.

A.3.1 Economic Relationships

This section describes economic relationships among basic Model units. These relationships are divided into two groups:

- Relationships among market forces which control the supply of and demand for land disposal capacity and its alternatives; and
- Relationships within the structure of the Fund. Here, the two primary components of the Fund balance -- expenditures and revenues -- are analyzed. Inflation and interest rates are also discussed.

Each is discussed below in turn.

A.3.1.1 Relationship Between the Demand for Land Disposal Capacity and the Facility Population

The interaction of the supply of and demand for disposal capacity plays a critical role in Model simulations. This is true for at least three reasons:

- The Model, as currently configured, simulates the opening of new disposal facilities in response to unmet demand. This has a direct impact on PCLTF expenditures because each facility has the potential to qualify for Fund coverage and thus generate costs to the Fund.

- The demand for disposal is also the tax base of the Fund. If the demand for disposal slackens (i.e., the volume of disposed wastes decreases), the tax base shrinks and, if the tax rate remains unchanged, Fund revenues fall.

- The fact that the Model incorporates market forces allows the user to simulate different policies that affect the price of disposal (e.g., a change in the tax rate) as well as the demand for disposal capacity (e.g., a ban on the land disposal of certain wastes). Because there is considerable uncertainty about the nature of these economic relationships, the Model allows the use of a wide range of economic assumptions. In doing so, the Model imposes an internal consistency which is described below.

This section presents the methods used to model both the supply of and the demand for disposal capacity. First, demand and the factors which affect it are discussed. Second, the Model's treatment of land disposal capacity is discussed.

The Demand for Land Disposal Capacity

The level of demand is one factor influencing the rate at which new facilities are added to the facility population; consequently, it influences the level of PCLTF expenditures. Furthermore, by modeling this demand, the implication for the PCLTF of various assumptions about the responsiveness of demand to changes in the prices of land disposal and substitute methods of waste management can be assessed.

The total demand for land disposal is simulated to be affected by three factors, each of which can either increase or decrease the volume of wastes. These factors are:

- growth of industrial output and changes in technology;
- price of land disposal; and
- price of substitutes for land disposal.

Each factor is discussed in turn and then the method for combining them is presented. Finally, the effect of inflation on demand is discussed.

Industrial Output and Technology. The first component of demand depends on growth in the level of industrial output and changes in technology. If the prices of land disposal and its substitutes stay fixed and the technical factors of waste generation are held constant, the volume of waste would be expected to grow in rough proportion to the growth of industrial output. With improvements in technology, the volume of waste may be expected to decline. Therefore, the Model calculates waste volumes using rates of growth and/or decline supplied by the user. To provide this information to the Model, the user specifies the annual rate of change for specified years (e.g., 1983, 1990, 2000, 2010, 2020, 2050, and 2083). For years between these dates, the Model interpolates a rate of change.

Because the influence of prices is accounted for elsewhere (see below), these assumptions about rates of growth or decline need only reflect expected changes in technology over time. Consequently, the rate of decline of 2 percent per year (used in Simulation 1) could be interpreted as a reduction in the amount of waste being produced (at constant real prices), despite expected growth in output due to changes in technology.

Price for Land Disposal. The second determinant of the demand for land disposal capacity is the price that is attached to it. The Model incorporates two facets of this market force. The first is a scenario of the projected price for land disposal in each year of the Model run. As with industrial growth, the user inputs prices for seven points in time in the Model simulation. Interpolation is used to determine the price in any of the intervening years. The second is the price responsiveness, or elasticity, of demand for disposal capacity. Elasticity is measured in the traditional form:

$$\text{Elasticity} = \frac{\text{Percent change in quantity of waste that is land disposed}}{\text{Percent change in price of disposal}}$$

Assume, for example, that the elasticity of demand is -0.5. This implies that if the price of land disposal were increased by 10 percent, there would be a drop of 5 percent in the quantity of land disposal capacity demanded.

Taken together, the projected prices and the elasticity of demand allow the Model to calculate the effect of changes in land disposal prices on total demand. In current simulations, the price of disposal is held constant at an arbitrary $100 per ton and the elasticity of demand is set equal to zero. The effect of these assumptions is to make the demand for land disposal independent of its price.

Prices for Substitutes for Land Disposal. In a manner analogous to that discussed for the price of land disposal, demand can also be affected by the price of substitutes for land disposal. In short, if an alternative to land disposal such as incineration or recycling were to change in price, we would expect the demand for land disposal to change somewhat in response. The magnitude of this change is described by the cross price elasticity of demand which takes the traditional form:

$$\text{Cross price Elasticity} = \frac{\text{Percent change in quantity of waste that is land disposed}}{\text{Percent change in price of non-land disposal option}}$$

As above, the user inputs to the Model a projected price scenario for the substitute. As with the price and elasticity of land disposal, the price projection and cross price elasticity for the substitute disposal method in current simulations have been set equal to a constant $100 per ton and 0.0, respectively.

Total Demand for Disposal. The three forces described above (the growth of output and changes in technology, the price and elasticity of demand for land disposal, and the price and elasticity for substitutes for land disposal) are combined in the Model to produce an estimate of demand for land disposal in each year of the Model run. Because the factors contributing to total demand are relative measures (i.e., they are calculated relative to the previous year's volume or price), the initial volume of waste is required. In the current simulations, this value is 64 million wet-weight tons of waste disposed in 1983 (taken from the preliminary results of the Mail Survey). Once the initial value is set, total demand is calculated for each year in the Model run in the following way:

Step One: The effect of the rate of growth or decline is calculated. The volume of wastes from the previous year is multiplied by one plus the rate supplied by the user. For year one, the previous year's waste is simply the initial level supplied by the user.

Step Two: The result obtained in step one is adjusted for the effects of price changes. This is done in two parts:

Step Two-A: The effect of a change in the price of land disposal is calculated. First, the proportional change in the real price is computed. This price change includes shifts in the tax rate which may result from a policy decision or because inflation causes the rate to drop in real terms. The proportional change in price is multiplied by the price elasticity for disposal to yield the proportional change in the volume of wastes that are land disposed. The volume of wastes from step one is then multiplied by this proportion to determine the change attributable to the prices of land disposal.

Step Two-B: The effect of a change in the price of the substitute is calculated. The proportional change in the real price of the substitute is computed and then multiplied by the elasticity to yield the proportional change in the volume of land- disposed waste. The result is then multiplied by the volume of wastes determined in step one and yields the change attributable to a change in the price of a substitute.

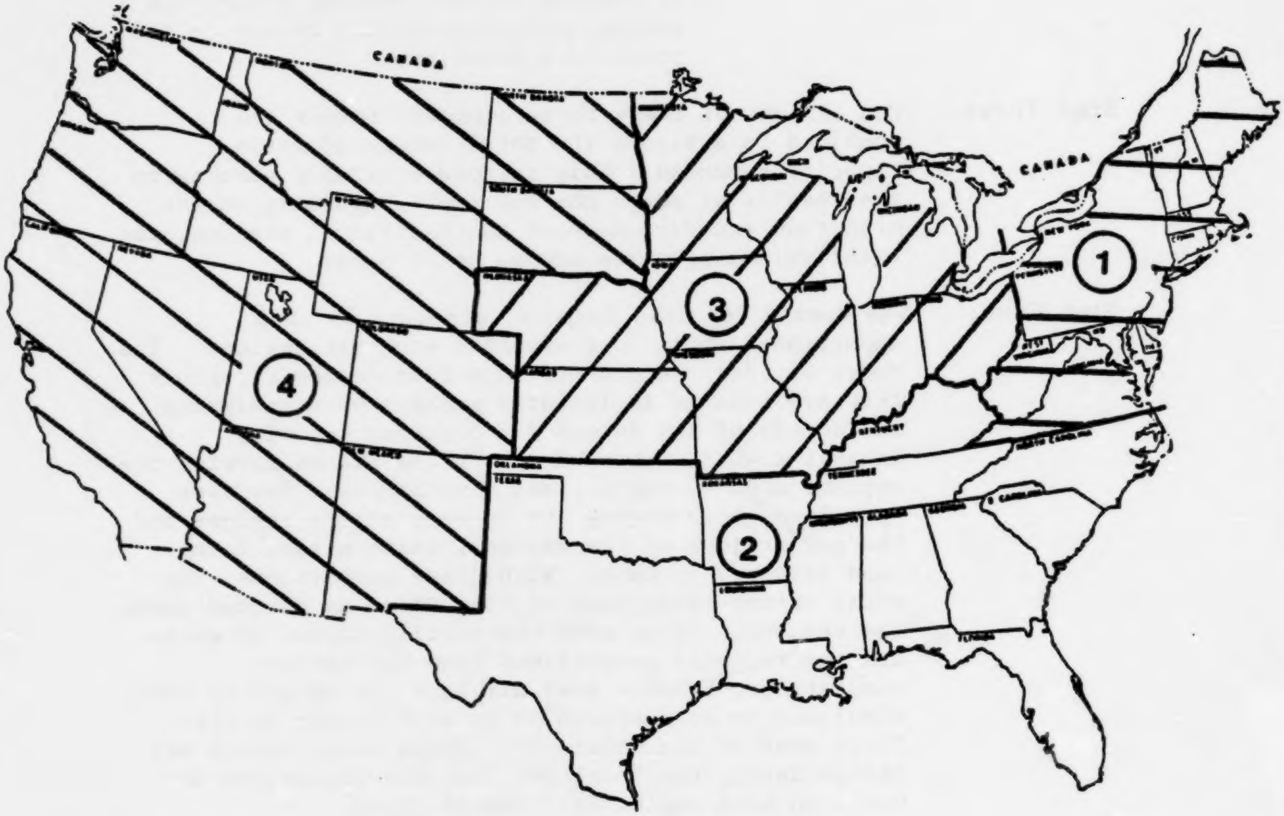
Step Three: The effects of these three economic forces are combined to estimate the total volume of waste capacity demanded. This is done by simply summing up the results of steps one and two. Depending on the magnitude and direction of the individual changes, the total volume of waste may go up or down.

Step Four: The demand for land disposal capacity is then apportioned among four separate economic regions. The Model divides the country into four economic regions that are treated as isolated markets when analyzing the supply of and demand for disposal capacity. Exhibit A-40 is a map of the United States showing the regions used in the current simulations. The user specifies which states are in each of the regions and the proportions of the national waste stream being land disposed in each. With these proportions, the total volume determined in step three is divided among the regions. Using both the initial volume of waste and the regional proportions from the current simulations, Exhibit A-41 displays the amount of waste simulated to be disposed of in each region in the first year of the Model run. These waste levels may change during the Model run, but the proportion of waste in each region will remain fixed.

Inflation. All calculations of demand are made in real dollars. Thus, the price projection scenarios are based on 1982 dollars, as are the elasticities. Of note is the fact that the tax rate is not in constant dollars, but is set at a fixed $2.13. With inflation, the rate will drop in real terms and must be adjusted back to 1982 dollars each time the annual calculation of total demand is done. The user supplies information about the inflation rate prior to the simulation. The user specifies the inflation rates for seven years (e.g., 1983, 1985, 1990, 2000, 2020, 2050 and 2083). For years between these dates, the Model interpolates to determine the annual inflation rates. These inflation rates are used as required to adjust between 1982 dollars and dollars in the other years of the analysis.

EXHIBIT A-40

MAP OF ECONOMIC REGIONS USED IN THE MODEL


CANADA
CANADA
1
2
3
4

Reproduced from best available copy.

EXHIBIT A-41

LAND DISPOSAL OF WASTES IN FIRST YEAR OF MODEL RUN

REGION	PROPORTION OF WASTE	VOLUME OF WASTE (Millions of Tons)	MEAN NUMBER OF FACILITIES (Standard Error of Estimate)	AVERAGE FACILITY CAPACITY 1/ (Thousands of Tons per Year)
1 - Northeast	.31	19.8	272 (2.1)	109
2 - Southeast	.27	17.3	393 (2.7)	66
3 - Midwest	.30	19.2	190 (2.0)	152
4 - West	.12	7.7	127 (2.0)	91
TOTAL	1.00	64	982 (3.9)	98

1/ Includes adjustment for excess capacity. See text.

Source: ICF Incorporated estimates based on Simulation I.

The Supply of Land Disposal Capacity

The supply of land disposal capacity plays an important role in the Model results. If there is unmet demand within one of the economic regions, the Model simulates the opening of new facilities. These facilities, if qualified for Fund coverage, may have a direct impact on Fund expenditures and, if unqualified, may generate costs to other funding sources.

The supply of land disposal capacity is assumed to be perfectly inelastic (i.e., elasticity = 0.0). This implies that supply is not affected by prices of disposal. Instead, supply is simulated to be provided (i.e., facilities are simulated to open) whenever there is unmet demand. This approach is consistent with the exogenous specification of the prices of disposal (and its substitutes) over time by the user. The Model assumes that demand, at the user-supplied prices, will be met.

In this section, we first discuss how the supply of land disposal capacity in each region is estimated. We then turn our attention to the means by which new capacity is added.

Capacity Estimates for Each Economic Region. To estimate the available capacity in each economic region, the Model goes through the following steps at the beginning of each year:

Step One: The average capacity of facilities in each region in year 1 is determined. The total volume of wastes (e.g., 64 million tons in 1983) is divided among the four economic regions based on proportions supplied by the user. This volume is then divided by the number of facilities to yield the average volume per facility. Finally, this number is increased to reflect an excess capacity factor supplied by the user. Based on Simulation 1, Exhibit A-41 shows the mean number of facilities in each of the four regions in year 1. For example, in region 1 there are 272 facilities. The exhibit also shows that about 19.8 million tons of waste were disposed in region 1. Thus, on average, each faciliity received 73,000 tons per year. Given the excess capacity factor of 50 percent (used in the current simulations), the Model estimates that the average capacity per facility in region 1 in the initial year is 109,000 tons per year (i.e., 73,000 x 1.5). The estimate of the initial average capacity in the current simulations is shown in Exhibit A-41.

Step Two: In each year of analysis, the Model assesses the number of "facility capacity units" in the region. At the outset of the Model run, the number of facility capacity units in each region is set equal to the number of existing facilities in the region. Thereafter, when a new facility opens in a given region, the number of capacity units for that region is incremented by an amount which depends both on the year and on the growth rate of average capacity as supplied by the user. This growth rate is used to determine the capacity units of the average facility opening in any given year with the following formula:

$$\text{Capacity Units} = (1 + \text{Growth Rate})^{\text{year}}$$

where:

Growth Rate = growth in average facilty capacity (user input)

Year = Model year of facility opening

For example, in the current runs of the Model, the growth rate is 1 percent. Thus, for facilities opening in year 5, capacity is assumed to be $(1.01)^5$ times the average year 1 capacity of facilities in the particular region. Whenever a facility closes, the Model subtracts from the region total the number of capacity units associated with the facility which is closing.

Step Three: For each of the four regions, total available capacity is calculated. The total number of capacity units (based on the number of facilities in the region and their opening dates) determined in step two is multiplied by the average capacity determined in step one. The result is the total available capacity in the region.

New Facility Opening: Once the total supply and demand for capacity have been calculated for a given region, a determination of whether to add new facilities is made. This occurs in the following way:

Step One: Within each economic region, total available capacity is compared to total demand. Total capacity may drop in any year if one or more facilities in the region have closed. Total demand will change based on industrial growth and price changes. If enough capacity is available to meet the demand for land disposal, nothing further is done and the Model moves on to evaluate capacity in the remaining economic regions.

Step Two: If there is not enough capacity to handle the volume of wastes in the region, the Model will simulate the opening of a new facility. The capacity of this facility will be equal to the year 1 average for that region plus the growth in average capacity that has taken place since. The regional count of capacity will be adjusted to reflect the new facility and will again be compared to the total demand in the region. If the demand is met by the addition of the facility, the Model moves on to evaluate the remaining regions. If supply is still less than demand, more facilities are added until the condition no longer exists. The number of facilities that can be added in a given region in any one year is currently limited to 10 percent of the facilities existing in that region in the year.

Also of note is that as currently configured, the Model does not simulate the closing of facilities in response to the growth of excess capacity. For example, if waste volumes were assumed to decline due to regulation, new facilities would not be added (as appropriate), but existing facilities would not be simulated to close prematurely in response to the decline.

A.3.1.2 Relationships Among Fund Balance, Revenues, and Spending

This section discusses the economic relationships that exist within the structure of the PCLTF Model. These relationships are an important determinant of the fiscal adequacy of the Fund. We first discuss how Fund expenditures are simulated on a fiscal year basis. Next is an analysis of Fund revenues, which requires the examination of both calendar and fiscal years. Finally, the interaction of the two is presented.

Fund Expenditures

Monitoring, Response, and Claims Costs. The costs associated with land disposal, as simulated by the Model, are discussed in section A.2.4, Actions, and section A.2.5, Claims. As these costs arise, different funding sources are responsible for meeting them. (See section A.2.6, Funding Sources). The ways that the costs are distributed are discussed in section A.3.4, Cost Allocation Policy. In this section, we discuss only those costs allocated to the PCLTF.

Depending on the number of years since closure and the facility's qualification status, the PCLTF may be responsible for:

- capital and recurring costs for response actions;
- liabilities arising from third-party claims; and
- routine monitoring and care costs.

At the end of each fiscal year, the amount of money spent on these costs by the Fund is totaled. This is by far the largest Fund expenditure.

Administrative Expenses. The costs of operating and administering the Fund are also borne by the Fund. The Model simulates these costs based on two user-supplied parameters:

- fixed administrative expense (e.g., $1 million per year); and
- proportion of fund expenditures used for administration (e.g., 10 percent of monitoring, response, and claims costs).

At the end of each fiscal year, the Model computes administrative costs based on the two methods outlined above. It chooses the cost estimate that is the higher of the two and uses only that one to simulate administrative expenses. In current simulations, the fixed-expense component is set equal to zero, while the proportional component is set at 10 percent.

Fund Revenues

Tax Base. The tax base is defined as the waste being disposed of in landfills, surface impoundments, injection wells, and land treatment facilities. Under the current statute, this waste is taxed on a dry-weight basis to fund the PCLTF. The total volume of waste from the Model's demand estimate forms the basis for the tax base. Total demand consists of all wastes, while the tax is levied only on the dry-weight portion. The user supplies a fraction of total waste which is dry weight so that the tax base can be calculated. In current simulations, this fraction is 28.4 percent.[76] This means that of the initial 64 million tons of wastes disposed, only about 18.2 million tons are taxable.

Tax Rates. Currently set at $2.13 per dry-weight ton, the tax is the primary method of raising revenue for the PCLTF. The user supplies the starting tax rate and determines if it will be indexed to inflation. At the end of each year, the appropriate rate is multiplied by the tax base to yield total revenues.

Fund Ceiling. Based on the statutory requirements of CERCLA, the Fund has a ceiling of $200 million, defined in terms of unobligated Fund balance. The unobligated Fund balance is the total fund balance minus any fund obligations (this concept is discussed further below). When the unobligated Fund balance reaches $200 million, the tax is no longer collected. When the balance drops below $200 million, the tax is again collected. In Simulation 1 (which is meant to reflect current policy), the unobligated balance first exceeds the ceiling in the sixth year.

Unlike Fund expenditures which are calculated on a fiscal year basis, taxes are collected on a calendar year basis. This is primarily because of the statutory provision for suspending the tax on January 1 of any given year if three months earlier, on September 30, the unobligated balance exceeds the ceiling. To make revenues comparable to spending, the assumption is made that revenues flow into the Fund at a steady rate over the calendar year. This assumption permits the Model simply to take three-quarters of the revenues collected in, say, calendar year 1985 and add one-quarter of the revenues from calendar 1984, to compute the total revenues for fiscal year 1985.

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[76] This was computed by assuming that the dry-weight portion equals: 100 percent of landfill wastes (equal to 3 percent of the total), 50 percent of land treatment wastes (equal to 1.4 percent of the total), 50 percent of surface impoundment wastes (equal to 38 percent of the total), and 10 percent of injection well wastes (equal to 57 percent of the total).

Fund Balance

In addition to the revenues and expenses described above, the Fund balance is affected by the borrowing and lending of Fund monies. These practices are described below and the method of determining the Fund balance is discussed. Finally, the definition of Fund obligations (used to calculate the unobligated Fund balance) is presented.

Interest Payments and Revenues. Interest payments and revenues may result from the financial management of the Fund. The Secretary of the Treasury may borrow money from the Treasury as deemed necessary. The Secretary is also permitted to invest such portions of the Fund which, in his judgment, are not required to meet current obligations. Investment must be in U.S. Treasury bonds or notes.

The model calculates the interest payments and revenues in the following manner:

Step One:	The tax revenues and fund expenditures are calculated on a quarterly basis over the fiscal year;
Step Two:	If the quarterly balance is negative, money is borrowed at the user-supplied interest rate in order to bring the Fund into balance;
Step Three:	If the quarterly balance is positive, the monies are invested at the user-supplied interest rate; and
Step Four:	Net interest, which is expressed in nominal dollars, is calculated as the difference between interest payments and earnings.

In the same way that the user specifies economic assumptions about growth and inflation, an interest rate scenario is supplied. The following assumptions were used in the current simulations:

	1983	1985	1986	1990	1995	2033	2083
Inflation	3.1	5.3	5.2	4.6	4.0	4.0	4.0
Interest Rate	8.0	10.0	9.2	5.7	5.1	5.1	5.1

The data for 1985 reflect current estimates. From 1990 onward, the difference between the interest rate and inflation is 1.1 percent. This difference is based on the observed relationship from 1960 to 1982 between the Consumer Price Index and the average Treasury security interest rate (averaged over the following maturities: 3 months, 6 months, 3 years, and 10 years).

Fund Balance. To determine the annual Fund balance, the Model simply sums (algebraically) interest payments; interest revenues; costs of monitoring, response, and claims activity; and tax revenues. As noted before, values of the Fund balance are expressed in inflated (i.e., nominal) dollars.

Obligated Fund Balance. Monies in the PCLTF may be either obligated or unobligated, depending on their commitment to specific projects. The unobligated Fund balance is equal to the total Fund balance minus the amount of obligated funds. Thus, a definition of obligated funds is required.

The Model permits the user to define obligated funds in one of three ways (Policy 3 is used in the current simulations).

- Obligated Fund Policy 1--Concept of obligated funds not used. Obligated funds equal zero.
- Obligated Fund Policy 2--Obligated funds are set equal to the post-closure care and recurring response costs for the current year multiplied by a user-specified number of years.
- Obligated Fund Policy 3--Obligated funds are set equal to the average of the previous three years of total PCLTF expenditures.

A.3.2 Regulatory Policy

This section presents the two major sets of regulatory policies which play important roles in the PCLTF Simulation Model:

- **Permit Policy**: defining the rate at which EPA requires and reviews permit applications from existing land disposal facilities and the bases used to make the permitting decision;
- **Action Policy**: defining the situations leading to the undertaking of monitoring and response actions.

Regulatory policies not discussed here include:

- Financial assurance requirements: discussed in section A.3.4, Cost Allocation Policy;
- PCLTF qualification requirements: discussed in section A.3.4, Cost Allocation Policy; and
- Allowable facility designs: discussed in section A.2.2, Facility-Level Characterization.

A.3.2.1 Permit Policy

Permit policy refers to the manner in which EPA requests and reviews final permit applications from existing land disposal facilities. (All new facilities are assumed to begin operation with permits.) This policy must be modeled because:

- Facilities which are not granted final permits will be required to cease accepting hazardous waste. The need for new land disposal capacity will be influenced by the reductions in capacity caused by these closures.

- Only facilities with final permits are eligible to be covered by the PCLTF.[77]

Because of these two roles of permits, the modeling of EPA's permit process must identify both when permit applications will be reviewed and whether permits will be granted to each of the facilities. This analysis was simplified by assuming that each existing facility will be reviewed once for the purpose of granting a permit. If a permit is granted, the facility is thereafter treated as a permitted facility. Otherwise, if a permit is denied, the facility will never obtain a final permit.

The permitting policy is defined by three characteristics: (1) rate; (2) information; and (3) decision rule. Each characteristic is defined in turn, and the assumptions used for each in the current simulations are presented.

Rate of Permit Review. The rate of permit review is defined by three variables: two time periods and one fraction. In the current simulations, the values are 2 years, 5 years, and 0.10, and are interpreted as follows:

- Within the first time period (2 years from the starting year of the Model), permit applications are reviewed at the defined fraction of facilities, 0.10 (i.e., 10 percent of all the existing facilities); and

- Between the first time period and the second time period (2 years to 5 years), the permit applications of the remaining fraction of facilities (1.0-0.1 = 0.9; i.e., 90 percent of the existing facilities) are reviewed.

This assumed rate of permit review is used to assign a year to each facility which identifies the time of its permit review. This year is stored at the facility level (as described in section A.2.2.1, Facility Milestones). The year for each facility is simulated as follows:

- A random number is drawn and compared to the defined fraction. If the random number is less than or equal to the fraction (0.10 in the current simulations), then the first time period is used. Otherwise, the second time period is used.

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[77] This is the current Agency interpretation of Section 107(k)(1) of CERCLA, which requires that the disposal facility "has received a permit under Subtitle C of the Solid Waste Disposal Act" in order to qualify for Fund coverage.

- Using the appropriate time period, the facility's permit review date is simulated by drawing randomly from a uniform distribution within the time period (i.e., the time is drawn from the range of 1 to 2, or the range 3 to 5).
- The facility's permit review date is stored at the facility level.

Of note is that the facility's permit review date is simulated independently from other facility characteristics. The possibility of reviewing permit applications from certain known problem facilities first is not examined. If a facility closes prior to having its permit application reviewed, it does not obtain a permit.

Information Supplied by the Facility for Permit Review. In the permit review process, the facility's owner/operator (O/O) must provide information to the Agency in order for the Agency to make its permit determination. Although a variety of data may be required, the modeling approach has been limited to the consideration of releases only.[78]

Information regarding releases is defined in terms of the seven release types included in the Model. At the simulated time of permit review, one or more of the releases may be simulated to have occurred, and the occurrence of the release(s) may or may not be simulated to be known. The occurrences of releases are simulated as described in section A.2.3, Modeling of Releases. At the time of permit review, releases that have occurred may be detected via two mechanisms: routine monitoring or site assessment.

As described in section A.2.2.2, Facility Attributes, and section A.2.4, Actions, routine monitoring may detect releases. However, this action may not be fully reliable, so that a release may go undetected. This failure to detect a release when it has in fact occurred is incorporated into the Model, as described in section A.2.4. For purposes of modeling the information available for permit review, it is assumed that the information obtained from the routine monitoring action is supplied to the Agency.

In addition to the routine monitoring data, the Model includes an option to require site assessments at the time of permit review. Although not used in the current simulations, this option was designed to simulate the impacts on permitting and Fund adequacy if more information were required at the time of permitting. The site assessment requirement is defined in terms of which of the seven releases the assessment would be able to detect if, in fact, they have been simulated to occur. For example, a site assessment requirement of release type 2, detectable constituents on site, would be interpreted as a requirement to undertake a study of the site which would reliably reveal whether release type 2 had already occurred. This information obtained through the site assessment would be in addition to the data uncovered through routine monitoring.

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[78] Other information required during permitting may include data concerning: liner/waste compatibility; financial assurance; liability insurance; waste management practices, and other data.

The final result of the information step in the permit review simulation is an indication of whether or not each of the seven release types has already occurred.

Permitting Decision Rule. The purpose of the permitting decision rule is to allow the Model user to specify the conditions under which a permit will be denied to a facility. The permit decision is based only on the release information for the facility, as described above. Consequently, the decision rule must describe whether an individual release or combinations of releases will result in a permit being denied.

Based on discussions with EPA, it was assumed for the current simulations that the detection of releases would not result in the denial of a permit. (This assumption was used for modeling purposes only and does not necessarily reflect current or future Agency policy.) Consequently, all facilities which desire final RCRA permits may receive them. However, EPA believes that some facility owner/operators may prefer to close rather than receive final permits. In the current simulations, it was assumed that a random 25 percent of existing facilities would prefer not to continue operation and would consequently close without obtaining final permits.

The user may specify a permitting decision rule which would deny permits on the basis of the evidence of releases, or combinations of releases. Using such a rule would selectively close down those facilities with groundwater contamination.

A.3.2.2 Action Policy

The purpose of the action policy is to define the actions (i.e., monitoring actions and response actions) which must be undertaken in certain situations. For example, when routine detection monitoring discovers a change in indicator parameters in groundwater, compliance monitoring is required. The action policy is used to specify this compliance monitoring requirement and the other action requirements.

To model the actions taken at land disposal facilities, a method was required which would identify those actions that should be undertaken in all situations which could arise. Because, with seven release types and various other factors, there could be tens or hundreds of different situations arising over time, it was not feasible to list every situation that could arise and identify the set of actions required in each. At a minimum, such a method would be unwieldy and difficult to modify to reflect alternative policies.

As an alternative to listing all the situations that could possibly arise, a rule-based approach was used. In this method, the user supplies a limited set of rules which describe how actions are to be turned on and off. As situations arise, the Model applies these rules and chooses actions as indicated. The advantages of this method include:

- a small set of inputs can describe the actions that should be taken in an unlimited number of situations; and

- the rules can be changed easily by the Model user to test alternative action policies and the implications the alternative policies have for costs and releases at facilities.

Such an approach, however, does require extra care on the part of the Model user to ensure that an internally consistent set of rules has been specified.

For the purposes of this presentation, the action rules have been divided into the following four categories:

- **Knowledge-to-Action Rules** identify which actions are taken in response to obtaining knowledge about the existence of a release. This set of rules is a major driving component of the overall Model because it specifies the relationship between release detection and action.

- **Substitute Rules** identify which action is to be undertaken as a substitute when an action specified in the knowledge-to-action rules cannot be undertaken.

- **Reset Rules** identify which action is to be initiated when an action is terminated.

- **Dominance Rules** identify the relationship among the various actions.

These four sets of rules define the relationships necessary to model actions at facilities. The first set, knowledge-to-action rules, is used to reflect regulatory policies. These rules may be changed to test alternative policies. The other three sets of rules reflect various relationships among the different actions. These relationships may be changed to reflect various assumptions; however, their current structure is believed to represent adequately the relationship among the actions modeled. Therefore, even if the knowledge-to-action rules were changed substantially to test various policies, the other rules could remain unchanged. Each set of rules is discussed below in turn.

Exhibit A-42 displays the knowledge-to-action rules used in the current simulations. These rules are organized in a matrix with 16 rows and 17 columns (not counting the rule number column). Each row is an individual rule. The columns are defined as follows:

- **Columns 1 and 2** identify the name and number of each release type which can lead to actions being taken. For example, row 1 is for release type 1, indicator parameters on site.

EXHIBIT A-42

KNOWLEDGE-TO-ACTION RULES USED IN THE CURRENT SIMULATIONS

Rule #	Release Name	Release Type	Release Condition	Monitoring Actions					Response Action			Care	Exposure	Claims			
				1	2	3	4	5	1	2	3			1	2	3	4
1	IP ON	1	0	-1	1	0	0	0	0	0	0	0	0	0	0	0	0
2	DET ON	2	0	-1	-1	1	1	0	1	1	0	0	0	0	0	0	0
3	DET ON	2	1	-1	-1	1	1	0	1	1	0	0	0	0	0	0	0
4	DET ON	2	-1	-1	-1	1	1	0	1	1	0	0	0	0	0	0	0
5	DET ON	2	3	-1	-1	1	1	0	1	1	0	0	0	0	0	0	0
6	TOX ON	3	0	-1	-1	1	1	0	0	0	0	0	0	0	0	0	0
7	TOX ON	3	1	-1	-1	1	1	0	0	0	0	0	0	0	0	0	0
8	TOX ON	3	-1	-1	-1	1	1	0	0	0	0	0	0	0	0	0	0
9	TOX ON	3	3	-1	-1	1	1	0	0	0	0	0	0	0	0	0	0
10	T/O OFF	4	0	-1	-1	1	0	0	0	0	0	0	0	0	0	0	0
11	DET OFF	5	0	0	0	0	-1	1	1	1	1	0	0	0	0	0	0
12	DET OFF	5	2	0	0	0	-1	1	1	1	1	0	0	0	1	1	0
13	DET OFF	5	-2	0	0	0	-1	1	1	1	1	0	0	0	1	1	0
14	DET OFF	5	4	0	0	0	-1	1	1	1	1	0	0	0	1	1	0
15	TOX OFF	6	0	0	0	0	0	0	0	0	0	0	-1	1	1	1	1
16	BATHTUB	7	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Columns:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

- **Column 3** identifies the release condition. The release condition is a code that defines the extent to which knowledge about the current and future status of the release has been obtained. For example, based on the performance of plume delineation and tracking on site, it may be known that the plume:

  - -- will migrate off site over time;
  - -- will not migrate off site over time; or
  - -- has already migrated off site.

  The choice of actions to undertake may vary depending upon this knowledge. For example, if plume delineation and tracking demonstrates that the plume will not migrate off site, then fluid removal and treatment may not be necessary. Alternatively, if the plume will migrate, or has already migrated off site, then fluid removal and treatment may be desired. This release condition code allows the user to specify action policies that vary by condition. There are seven possible values for the condition code:

  - -- 0: no information;
  - -- 1: release has not yet migrated off site, but it will;
  - -- -1: release will not migrate off site;
  - -- 2: release has not yet become toxic off site, but it will;
  - -- -2: release will not become toxic off site;
  - -- 3: release has already migrated off site; and
  - -- 4: release is already toxic off site.

- **Columns 4 through 17** identify the actions to be taken. Within each column, a -1, 0, or 1 can be entered to signify stopping the action, no effect on the action, or starting the action, respectively. The actions are:

  - -- Monitoring Actions:

    1. routine monitoring for indicator parameters at on-site monitoring wells
    2. monitoring for hazardous waste constituents at on-site monitoring wells
    3. plume delineation and tracking on site
    4. monitoring for hazardous waste constituents off site
    5. plume delineation and tracking off site

  - -- Response Actions:

    1. cap repair
    2. fluid removal and treatment on site
    3. fluid removal and treatment off site

  - -- Post-Closure Care

-- Exposure: defined as the use of groundwater near the facility for drinking. This action can only be assigned a 0 or -1 (the -1 meaning that people stop using the water for drinking)

-- Claims:

1. personal injury claims
2. real property claims
3. economic loss claims
4. natural resource damage claims

These claims can only be assigned a 0 or a 1 (the 1 meaning that the claim is brought).

Using these column definitions, each rule (i.e., each row of the matrix in Exhibit A-42) can be interpreted. For example, rule 1 means that in response to detecting response type 1, monitoring action 1 (routine monitoring for indicator parameters on site) is stopped and monitoring action 2 (monitoring for constituents, i.e., compliance monitoring) is begun. Rule 1 also implies that there is no impact on any of the other actions or claims as the result of detecting release type 1.

Rule 2 implies that in response to discovering detectable concentrations of constituents on site, plume delineation and tracking on site, cap repair, fluid removal and treatment on site, and monitoring for constitutents off site are undertaken. Also, monitoring actions 1 and 2 are terminated.

As the matrix shows, rules were not varied using the condition codes. Also, rules 6 through 9 are redundant because no additional actions are taken when a release is found to be toxic relative to when it is only detectable. (Because a release must be detectable before it can be found to be toxic, rules 2 through 5 must be in force if any of the rules 6 through 9 apply. Therefore, rules 6 through 9 are not necessary under the set of assumptions presented in the exhibit. However, they are included in the exhibit to show the level of resolution that could be attained if desired.)

Several important observations can be made regarding these knowledge-to-action rules:

- Claims are only simulated to be brought in response to off-site releases. No claims are simulated for release types 1, 2, 3, 4, or 7.

- Corrective action (i.e., plume delineation and tracking and fluid removal and treatment), is assumed to be taken in response to finding detectable concentrations of constituents on site, regardless of the potential for off-site migration. EPA believes this rule is most consistent with the current corrective action regulations. Alternative rules would permit an analysis of the cost implications of not requiring corrective actions in cases when releases are not anticipated to migrate off site.

- Only monitoring is taken in response to the detection of taste and odor off site. This monitoring action would subsequently lead to other actions, including corrective actions, given that the release in fact has migrated off site.

Up to 24 different rules can be identified by the user. Whenever a release is detected, the condition of the release is evaluated, and the appropriate rule is found by matching the release number and release code. Once the rule is found, the action changes (-1, 0, +1) are identified and performed. If an action which is not ongoing is to be terminated (i.e., has a value of -1), then the -1 has no effect. If an action which is already being performed is to be initiated (i.e., has a value of +1), then the starting date for the action is updated to reflect the later request for the action to begin.[79] If a claim is brought for a second time, only the incremental value of the second claim which is in excess of the compensated portion of all previous claims is counted. In this manner, care is taken to ensure against double counting of the costs of actions and claims.

These knowledge-to-action rules are the primary means via which actions are modeled. In addition, the substitute, reset, and dominance rules play a role in special circumstances.

The substitute rules are used to specify a substitute action when a desired action cannot be undertaken. For example, based on knowledge-to-action rule 1 (see Exhibit A-42), monitoring action 1 may be terminated and monitoring action 2 may be initiated. However, if a funding source is not available for monitoring action 2, it is not initiated. Were this the end of the story, the result would be no ongoing monitoring actions at the facility (because monitoring action 1 was terminated and 2 could not start). To incorporate the fact that alternative actions may be contemplated when funding is not available, the substitute rules were developed.

The substitute rules identify one substitute for each action, as displayed in Exhibit A-43. For example, the substitute for monitoring action 2 is monitoring action 1. Therefore, if monitoring action 2 cannot be initiated due to a lack of funding, then its substitute, monitoring action 1, is initiated. The realism of the choice of actions is enhanced through the use of these substitute rules. As described below, before the substitute action is initiated, it must also conform to the dominance rules.

The reset rules are similar to the substitute rules. When an action is terminated after having been performed for a period of time, the actions at

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[79] Updating the starting date has the effect of increasing the length of time the action is performed. For example, an action may begin in year 10 and may be required to be performed for 30 years. If in year 20 the action is again specified to be started under a separate rule (even though it is already ongoing), the start time is updated to year 20. Because the 30 year duration still applies, the action must be performed until year 50, or for a total of 50 - 10 = 40 years.

EXHIBIT A-43

SUBSTITUTE ACTIONS[1]

		Substitute Actions								
		Monitoring Actions[2]					Response Actions[3]			Post-Closure Care
		1	2	3	4	5	1	2	3	
Monitoring Actions	1	0	1	0	0	0	0	0	0	0
	2	1	0	0	0	0	0	0	0	0
	3	0	1	0	0	0	0	0	0	0
	4	0	0	0	0	1	0	0	0	0
	5	0	0	0	1	0	0	0	0	0
Response Actions	1	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	1	0	0	0
	3	0	0	0	0	0	0	1	0	0
Post-Closure Care		0	0	0	0	0	0	0	0	0

---

[1] 1 indicates action which is a substitute.

[2] Monitoring Actions:
1: Monitoring for indicator parameters at the on-site monitoring well.
2: Monitoring for hazardous waste constituents at the on-site monitoring well.
3: Plume delineation and tracking on site.
4: Monitoring for hazardous waste constituents off site.
5: Plume delineation and tracking off site.

[3] Response Actions:
1: Surface sealing.
2: Fluid removal and treatment on site.
3: Fluid removal and treatment off site.

the facility are reset, or returned, to a specified condition. For example, when an owner/operator completes the necessary compliance monitoring at a facility, he reverts to detection monitoring. This principle is applied through the use of the reset rules, which are displayed in Exhibit A-44. As the exhibit shows, it was assumed that monitoring action 1 was the reset action for all the other actions.[80]

When actions are specified with the substitute or reset rules, they are not taken automatically. To ensure against taking unnecessary actions, the concept of action dominance is introduced. If action A dominates action B, and if action B is requested as a substitute or reset action, it is only initiated if action A is not already ongoing. For example, when fluid removal and treatment on site is completed, monitoring action 1 is identified as a reset action. However, if monitoring action 2 is ongoing (which could occur), then monitoring action 1 need not be initiated. Using the concept of dominance, the heirarchy of actions is defined so that only the necessary substitute and reset actions are initiated. Exhibit A-45 displays the dominance rules. For example, the first row implies that monitoring action 1 is dominated by monitoring actions 2 and 3 and response action 2.

These four sets of action rules are an enormously powerful tool for assessing alternative action policies. Of primary importance is the knowledge-to-action rules which perform the bulk of the work. The substitute, reset, and dominance rules enhance the realism of the analysis and allow the full dynamic nature of the actions to be reflected in the Model.

A.3.3 Financial Relationships

This section describes the financial relationships used to assess an owner/operator's ability to cover expenditures at his facilities. The relationships are an important driving force in the Model because they influence the rate at which owner/operators go bankrupt, which renders them unable to cover costs at facilities. The relationships are described in the following two sections:

- Background rate of bankruptcy. These data describe the rate at which owner/operators terminate business for reasons other than expenditures at owned facilities.

- Bankruptcies due to costs at hazardous waste facilities. For firms not simulated to fail due to background causes, the relationship between revenues and expenditures is used to simulate the rate at which owner/operators choose to terminate business due to the expenditures at owned facilities.

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[80] No reset action was specified for monitoring action 1 because it is assumed to be required in perpetuity, unless terminated by a knowledge-to-action rule or the lack of funding.

EXHIBIT A-44

RESET ACTIONS[1]

		Reset Actions							
		Monitoring Actions[2]					Response Actions[3]		
		1	2	3	4	5	1	2	3
Monitoring Action	1	0	0	0	0	0	0	0	0
	2	1	0	0	0	0	0	0	0
	3	1	0	0	0	0	0	0	0
	4	1	0	0	0	0	0	0	0
	5	1	0	0	0	0	0	0	0
Response Action	1	0	0	0	0	0	0	0	0
	2	1	0	0	0	0	0	0	0
	3	1	0	0	0	0	0	0	0

---

[1] 1 indicates action which is the reset action.

[2] Monitoring Actions:
1: Monitoring for indicator parameters at the on-site monitoring well.
2: Monitoring for hazardous waste constituents at the on-site monitoring well.
3: Plume delineation and tracking on site.
4: Monitoring for hazardous waste constituents off site.
5: Plume delineation and tracking off site.

[3] Response Actions:
1: Surface sealing.
2: Fluid removal and treatment on site.
3: Fluid removal and treatment off site.

EXHIBIT A-45

DOMINANCE RULES[1]

Substitute or Reset Action		Ongoing Actions								
		Monitoring Actions[2]					Response Actions[3]			Post-Closure Care
		1	2	3	4	5	1	2	3	
Monitoring Actions	1	0	-1	-1	0	0	0	-1	0	0
	2	0	0	-1	0	0	0	-1	0	0
	3	0	0	0	0	0	0	-1	0	0
	4	0	0	0	0	-1	0	0	-1	0
	5	0	0	0	0	0	0	0	-1	0
Response Actions	1	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
Post-Closure Care		0	0	0	0	0	0	0	0	0

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[1] -1 indicates that the ongoing action dominates the substitute or reset action.

[2] Monitoring Actions:
1: Monitoring for indicator parameters at the on-site monitoring well.
2: Monitoring for hazardous waste constituents at the on-site monitoring well.
3: Plume delineation and tracking on site.
4: Monitoring for hazardous waste constituents off site.
5: Plume delineation and tracking off site.

[3] Response Actions:
1: Surface sealing.
2: Fluid removal and treatment on site.
3: Fluid removal and treatment off site.

A.3.3.1 Background Rate of Bankruptcy

Owner/operators may terminate all business activity at any time during a facility's life cycle. The background rate at which this may occur (i.e., due to causes not associated with the land disposal of hazardous waste) has been estimated for the current population of owner/operators.[*1] This background rate is important because it defines the minimum rate at which owner/operators will declare bankruptcy.

An owner/operator's net worth provides an indication of the owner/operator's financial strength and is used to assess firm viability. The Model user can specify two categories of simulated net worth that determine the rate at which firms declare bankruptcy. Estimated background bankruptcy rates of 0.42 percent and 0.26 percent for firms whose net worth is less than $10 million and greater than $10 million, respectively, are used for the simulations described in this report. These rates are for bankruptcies due to reasons other than expenditures for actions at facilities and are indicative of the minimum rate at which firms owning land disposal facilities will go bankrupt.

A.3.3.2 Bankruptcies Due to Costs at Hazardous Waste Facilities

To assess PCLTF adequacy, it was necessary to go beyond the background bankruptcy rates to simulate how owner/operators may cover the costs of monitoring, response, and claims arising at hazardous waste facilities. For example, because the owner/operator's share of corrective action costs may be very large, this cost may itself force the owner/operator into bankruptcy. Neglecting these cases of owner/operator bankruptcy would result in an overestimate of the owner/operator's ability to cover costs, and possibly, an underestimate of PCLTF expenditures. Thus, after the chance of routine business failure has been simulated, the Model determines if bankruptcy is likely to result from the costs of a firm's land disposal operations.

This section presents the method used to simulate bankruptcies attributable to land disposal activities. The key assumption underlying this method is that firms will cease operations if they perceive that expenses will exceed revenues for some period of time (e.g., over the next 10 years). The viability of the owner/operator of each facility is evaluated at the beginning of each year. Facilities that are owned by the government (federal, state or municipal) are assumed always to have a viable owner (consequently, they are not evaluated for possible bankruptcy). The following procedure is used to assess the viability of each facility's owner/operator.

Step 1: Select the appropriate return on assets for the firm. The Model user provides a return on assets for each of the two net worth categories used for simulating background business failures. In the simulations described in this report, a return on assets of 6 percent was assumed for all firms.

[*1] The firm population on which the distribution is based includes firms other than those owning land disposal facilities.

Step 2: Using the firm's simulated total assets[82] and the return on assets from Step 1, estimate the firm's expected annual revenue. The expected annual revenue is the return on assets times the total assets.

Step 3: Simulate the owner/operator's current expenditures for capital investments, O&M costs, and claims of its facilities. Because firms may own more than one facility, the sum total of all the expenditures for the firm must be simulated. For example, if the owner/operator of facility A owns a total of four facilities, the total firm expenditures will include the expenditures from facility A plus simulated expenditures from three other facilities. The expenditures for the three other facilities are simulated by drawing from the distribution of costs at other facilities owned by non-government viable owners.

Step 4: Adjust expenditures to reflect taxes and market constraints. Capital expenditures are adjusted downward to reflect the investment tax credit and are then depreciated over time.[83] Next, all costs (including depreciation of capital costs, O&M expenses, and claims costs) are adjusted downward to account for:

-- The degree to which costs can be passed on to customers; and[84]

-- The marginal corporate tax rate.[85]

Step 5: Compute the present value of both revenues and expenditures over the next ten years. A zero percent discount rate was used to calculate these present values. This low value is warranted because if the firm declares bankruptcy, the owners may lose control of the company's assets and may be unable to make profits in the foreseeable future. Consequently, the opportunity cost of the assets (as seen by the firm owners) may be essentially zero.

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[82] An owner/operator's total assets are simulated as described in Section A.2.2.1, Facility Milestones.

[83] An investment tax credit of 10 percent is used for all the simulations described in this report.

[84] For the purposes of this analysis, it has been assumed that it is not possible for facility owner/operators to pass on any of their costs to their customers. This is a "worst case" because it maximizes the number of bankruptcies.

[85] The marginal corporate tax rates used are 0.40 for firms with a net worth of less than $2.5 million and 0.46 for all other firms.

Step 6: Determine if the firm chooses to cease operations by comparing the present values using a "rational quit" rule. Under this rule, a firm will go out of business if, on a present-value basis, expenses are simulated to exceed revenues over the next ten years.

The outcome of Steps 1 through 6 for a particular facility is that the facility's owner/operator may go bankrupt and consequently no longer be able to cover costs at the facility. When this occurs, the costs of ongoing actions and claims are reallocated to the alternative funding sources (state funds, PCLTF, Superfund), as available.

A.3.4 Cost Allocation Policy

This section describes the relationships used to allocate costs among available funding sources. Costs arise at facilities, and using the various relationships described here, they are assigned to one of the funding sources described in Section A.2.6, Funding Sources. This section is divided into two parts:

- **Qualification Policy** identifies the rules used to simulate whether facilities qualify for Fund coverage; and

- **Allocation of Costs to Funding Sources** identifies the relationship between cost allocation and facility characteristics.

Each is discussed in turn.

A.3.4.1 Qualification Policy

The qualification policy is used to model Fund coverage. A series of rules is specified which define those conditions that must be met in order for a facility to be covered by the PCLTF. If a facility meets the specified conditions, it is said to be "qualified for Fund coverage," or just qualified.

At any point in time, a facility's qualification status may be:

- pending, i.e., yet to be determined;
- qualified; or
- unqualified.

Once a facility becomes qualified or unqualified, its qualification status may no longer change. The relationships discussed in this section are used to model the decision regarding qualification.

Section 107(k) of CERCLA identifies three basic requirements to qualify for Fund coverage:

- a final RCRA permit has been received;

- the owner/operator has not violated permit requirements that would affect the performance of the facility following closure; and
- based on up to five years of monitoring after closure, there is no substantial likelihood of future release from containment or other risk to public health or welfare.

The regulations interpreting these statutory requirements have not yet been promulgated by EPA. For purposes of modeling the qualification process, we developed several simple rules the user can use to specify a qualification policy. As described below, these rules have three parts which specify: the timing of the qualification decision; the roles which releases and responses to releases play; and the role which financial assurance plays. Of note is that the rules do not incorporate various types of permit violations, such as inadequate closure, improper waste handling, or other factors.

The first part of the rule specifies the timing of the qualification decision. In the current simulations, all permitted facilities are assumed to have this determination made five years after closure, as specified in CERCLA section 107(k).[86] This time can be altered by the Model user by supplying an alternative value. The qualification determination period does not vary across facilities, except as specified in the second part of the qualification rule.

The second part of the rule is used to reflect the CERCLA requirement of "no substantial likelihood of release." Based on discussions with EPA, this requirement is modeled by using the simulated detection of releases at facilities at the time of the qualification decision. Because EPA feels it is unlikely that analyses predicting the likelihood of future releases will be required to meet the CERCLA requirement, the Agency has chosen to model the qualification decision based on the evidence of past releases. This information would be available at the time the decision is made. Consequently, the second part of the rule specifies the extent to which the detection of any of the seven release types influences the qualification decision.

In the current simulations, the detection of any release prior to the qualification decision was assumed to be sufficient to disqualify the facility from Fund coverage. In this manner, only those facilities that had not had any release up to that point were accepted into the Fund.

Because there is uncertainty regarding the appropriate interpretation of the "no substantial likelihood" requirement, several alternatives were built into this part of the qualification rule. For each of the seven release types, the user may identify one of four alternative influences on facility qualification:

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[86] Non-permitted facilities are disqualified when their permit is denied.

- The release has no impact on qualification, i.e., if the release was detected, the facility may still qualify for Fund coverage;
- If the release is detected and all appropriate response actions have been taken, the facility's qualification determination is delayed until the response actions are completed. If all the necessary response actions are completed, the facility will qualify for Fund coverage at the time of completion. If the owner/operator is unable to complete the actions as required, the facility is disqualified.
- If the release is detected and all the appropriate response actions are completed prior to the qualification determination, then the facility may qualify for coverage. If, at the time of the decision, the actions are ongoing, the facility is disqualified.
- If the release is detected, the facility is disqualified.

In the current simulations, the fourth alternative is used for all the releases: disqualification due to detection. The other alternatives are less stringent and would allow wider Fund coverage than that currently considered. These alternatives may be used to assess the implications of alternative qualification requirements on potential Fund expenditures.

The final part of the qualification rule defines the role in the qualification decision of the owner/operator's obligation to perform post-closure care. The Model user may define whether defaulting on post-closure care obligations prior to the qualification determination will result in disqualification. In the current simulations, it was assumed that if the owner/operator failed to provide post-closure care at least until the time the qualification decision is made, then the facility would be disqualified. The user also has the option of omitting this requirement.

Based on these rules, the qualification status of each permitted facility is simulated. The facility's qualification status is stored at the facility level and is used as a facility characteristic for allocating costs. The method used to perform the allocation is described next.

A.3.4.2 Allocation of Costs to Funding Sources

When a cost is simulated to arise at a land disposal facility, the Model looks for a funding source to cover the cost. When performing this cost allocation, certain rules specify which funding sources may be used and the order in which they are used. The order is particularly important because if the funding source specified as first (e.g., the owner/operator) is able to pay the entire cost, then the second and third funding sourcs (e.g., PCLTF and state funds) would not be called on to cover the cost.

The potential funding sources (discussed in section A.2.6) for actions and claims are:

- Owner/operator financial assurance mechanism;
- Owner/operator;
- State fund;
- Superfund;
- PCLTF; and
- Gap (i.e., the costs go unfunded).

These funding sources need not cover all types of actions and claims. For example, in Simulation 1, financial assurance covers only routine monitoring and care.

The allocation policy is defined in three steps. First, allocation orders are defined. Exhibit A-46 shows the orders used for Simulation 1. For example, order number 4 (the fourth row in the exhibit) gives the financial assurance mechanism first responsibility. Should it fail to cover the cost, the model looks to the owner/operator. If the owner/operator is out of business or the cost exceeds his ability to pay, the model looks to the state fund if one is simulated to exist. Absent a state fund, the cost would go uncovered, and consequently goes to the "gap." In each of the orders (i.e., rows) in Exhibit A-46, a zero indicates that the funding source is not used. The choice of allocation order is discussed below.

The method of modeling the adequacy of each funding source is described elsewhere in this appendix. The viability of financial assurance mechanisms is described in section A.2.2.1, Facility Milestones. Owner/operator viability is discussed in section A.3.3, Financial Relationships. The simulation of state funds and the Superfund is described in section A.2.6, Funding Sources. Finally, the determination of PCLTF coverage is described in Section A.3.4.1, Qualification Policy.

The second part of an allocation policy involves reflecting the cost sharing provisions of CERCLA. The Model user specifies the fraction of monies spent by Superfund that is provided by the states.[87] The state share of these costs may vary depending on the type of cost and ownership of the facility. Exhibit A-47 displays the allocation of the state share of Superfund spending used in Simulation 1. The states are simulated to cover 10 percent of the non-claims costs paid by Superfund at private facilities and 50 percent of these costs at state and municipal facilities. The state share of Superfund spending is paid regardless of the simulated state coverage regime.[88]

The third part of an allocation policy involves applying the orders and state share of Superfund allocations developed in the previous steps to particular costs at different stages of a facility's lifetime. An allocation order is specified for each cost type over time. Exhibit A-48 shows the

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[87] See CERCLA section 104(c).

[88] See Section A.2.6 for a description of State coverage regimes for third-party claims and response costs.

EXHIBIT A-46

ALLOCATION ORDERS

ORDER #	OWNER/OPERATOR FINANCIAL ASSURANCE	OWNER/OPERATOR	STATE FUND	PCLTF	SUPERFUND	GAP
1	0	1	0	0	0	2
2	0	1	0	0	2	3
3	0	0	1	0	0	2
4	1	2	3	0	0	4
5	0	1	2	0	0	3
6	0	0	0	0	1	2
7	0	0	0	1	0	0
8	0	1	0	2	0	0
9	1	2	0	0	0	3

EXHIBIT A-47

STATE SHARE OF SUPERFUND ALLOCATIONS

	FACILITY OWNER				
	Private	Municipal	State	Federal	Other
COST TYPE					
MONITORING:					
Indicates Parameters On Site	0.1	0.5	0.5	0.0	0.0
Constituent On Site	0.1	0.5	0.5	0.0	0.0
Plume Del. On Site	0.1	0.5	0.5	0.0	0.0
Constituent Off Site	0.1	0.5	0.5	0.0	0.0
Plume Del Off Site	0.1	0.5	0.5	0.0	0.0
RESPONSE:					
Surface Sealing	0.1	0.5	0.5	0.0	0.0
Fluid Removal On Site	0.1	0.5	0.5	0.0	0.0
Fluid Removal Off Site	0.1	0.5	0.5	0.0	0.0
POST-CLOSURE CARE	0.1	0.5	0.5	0.0	0.0
CLAIMS:					
Personal Injury	0.0	0.0	0.0	0.0	0.0
Real Property Damage	0.0	0.0	0.0	0.0	0.0
Economic Loss	0.0	0.0	0.0	0.0	0.0
Natural Resource Damage	0.0	0.0	0.0	0.0	0.0

EXHIBIT A-48

COST ALLOCATION POLICY USED IN SIMULATION I

ROW	FACILITY STATUS	COSTS TYPES												
		MONITORING ACTIONS					RESPONSE			CARE	CLAIMS			
		1	2	3	4	5	1	2	3		1	2	3	4
1	IN OPERATION	1	1	1	1	1	1	1	1	1	9	9	9	2
2	CLOSED, QUALIFICATION PENDING	4	4	2	2	2	2	2	2	4	5	5	5	2
3	CLOSED LESS THAN 30 YEARS, QUALIFIED	4	4	2	2	2	2	2	2	4	7	7	7	7
4	CLOSED MORE THAN 30 YEARS, QUALIFIED	7	7	7	7	7	7	7	7	7	7	7	7	7
5	CLOSED LESS THAN 30 YEARS, UNQUALIFIED	4	4	2	2	2	2	2	2	4	5	5	5	2
6	CLOSED MORE THAN 30 YEARS, UNQUALIFIED	3	3	6	6	6	6	6	6	3	5	5	5	2

MONITORING ACTION TYPE:
1. Indicator parameters monitoring on site.
2. Constituent monitoring on site.
3. Plume delineation on site.
4. Constituent monitoring off site.
5. Plume delineation off site.

RESPONSE ACTION TYPE:
1. Surface sealing.
2. Fluid removal on site.
3. Fluid removal off site.

POST-CLOSURE CARE

CLAIM TYPE:
1. Personal injury.
2. Real property.
3. Economic loss.
4. Natural resource damage.

policy for Simulation 1. Using this information in conjunction with the allocation orders from Exhibit A-46, an allocation policy is completely specified. Thus, the allocation policy can be described as follows (row numbers refer to Exhibit A-48):

Row 1: The owner/operator alone is responsible for monitoring and response costs during the facility's operation (allocation orders 1 and 9). The owner/operator is also initially responsible for natural resource claims although if the owner/operator is unable to provide the necessary funds, the Superfund is simulated to cover these costs.

Row 2: Following closure, a facility's PCLTF status is pending, and allocation orders 2, 4 and 5 are used. For routine monitoring and care, the owner/operator's financial assurance mechanism has the first responsibility to cover costs (allocation order 9).

Row 3: For qualified facilities closed less than 30 years, the PCLTF will cover the costs for third-party claims. Responsibility for monitoring, response, and care actions is not affected (i.e., the allocation orders for these costs remain unchanged).

Row 4: Following the post-closure period (30 years), the PCLTF covers all costs at qualified facilities (allocation order 7).

Row 5: For unqualified facilities, no costs are covered by the PCLTF. The responsibility for cost coverage remains as if the facility's qualification status was pending.

Row 6: After the end of the post-closure period (30 years), the owner/operator is no longer responsible for certain costs. Consequently, the allocation order 4 (in row 5) is replaced with 3, and order 2 is replaced with 6. Depending on the type of facility owner, the State will pay a share of Superfund expenditures (see exhibit A-47).

The use of different allocation orders for different costs permits the user a great deal of flexibility in simulating different policies. One of the Model's strengths here is that it allows very dissimilar policies to be analyzed. For example, by varying the allocation rules, the user might assign all costs to the states. Likewise, a policy that holds owner/operators responsible for more costs over a longer period of time can be simulated.

A.3.5 The Effect of Response Actions on Releases

Various actions are simulated by the PCLTF Model to be taken at hazardous waste land disposal facilities in response to the detection of releases. As described in Section A.2.4, Actions, these actions have costs and are able to detect releases. In addition, the three response actions (cap repair, fluid removal and treatment on site, and fluid removal and treatment off site) can clean up contaminated groundwater and can influence whether and when releases will occur in the future. This ability to influence releases is a benefit of taking the actions which must be considered in the facility-level modeling in the PCLTF Simulation Model. Were this characteristic of response actions omitted, the Model would be biased because the costs of performing the actions would be included, but the benefits of the actions would not be considered. Therefore, a relationship describing the effects of response actions on releases is a necessary component of the PCLTF Model.

To model the effectiveness of response actions, one would prefer to characterize and simulate the physical processes that govern the manner in which the response action takes place. For example, a series of differential equations could be used to describe how the concentration of constituents in groundwater changes over time and space as fluid is withdrawn through a group of wells. The solution to these equations would identify the length of time (or amount of fluid) required to reduce groundwater contamination to a given level.

Unfortunately, the physical processes underlying the effectiveness of response actions are only partially understood. Very little empirical data are available which describe the performance of well fields used to clean up groundwater contaminated with hazardous substances. EPA is currently undertaking research to improve its understanding of the effectiveness of the methods available for cleaning up groundwater. For purposes of the PCLTF Simulation Model, an alternative approach was required.

To simulate response actions in the Model, a parametric approach was adopted. A parametric modeling approach does not simulate the underlying physical processes of a phenomenon, but instead uses a simplified expression believed to be capable of exhibiting the major properties of the phenomenon. The simplified expression is defined using one or more parameters that can be easily modified to reflect various assumptions regarding the properties of the phenomenon.

The expression used in the PCLTF Model to model the effectiveness of releases uses the following components:

- required duration of the action at the facility;
- completed portion of the action at the facility;
- a user-supplied parameter describing the effectiveness of response actions at all facilities.

The required duration is initially defined for each facility using the duration characteristic of the action (see section A.2.4). For example, in the current formulation of the Model, fluid removal and treatment on site requires 100 years to complete. This required duration is adjusted at the facility level if the action is resumed after being partially completed previously. The facility is given credit for partially completed actions, thereby reducing the required duration when the action is initiated for a second time (see section A.2.2.2, Facility Attributes).

The completed portion of the action is also a facility-level characteristic. When a response action is stopped at a facility, the portion of the action completed is calculated. Stored at the facility level is the fraction of response action completed (referred to here as the "fraction completed"), which is the portion completed (defined in terms of time) divided by the required duration. This fraction completed is used along with the user-supplied parameter as the basis for simulating the effectiveness of response actions.

We have hypothesized that the following properties should be reflected in the relationship:

- the effectiveness of the response action is an increasing function of the fraction of the response action completed;
- if the response action is fully completed (i.e., fraction completed equals 1.0), then it is fully effective;
- if the response action is not initiated (i.e., fraction completed equals 0.0), then it has no effect; and
- the user-supplied parameters should be capable of scaling the effectiveness of the response action between the bounds of zero effectiveness and fully effective to reflect alternative assumptions regarding the shape of the function between these bounds.

These properties are reasonable because the longer the response action is performed, the more successful it is likely to be. At the limit, when it is performed for its full duration, then the action is completely successful. Clearly, with the use of this method, the assumed action duration becomes an important input to the Model. Unfortunately, there is considerable uncertainty surrounding the necessary durations of response actions because of the incomplete understanding of the physical processes that govern the actions. The durations chosen as input are, however, based on the most recent analyses of these actions. In developing the Model, we felt that allowing the user to specify a duration was preferred to specifying assumptions regarding complex physical relationships. Using a duration simplifies the Model and makes it easier for the user to control the assumptions used in the analysis.

The relationship that forms the basis for simulating the effectiveness of response actions is as follows:

$$\text{Effectiveness} = (\text{Fraction completed})^{\text{SCALE}}$$

where:

Effectiveness = a measure of the effectiveness of the response action;

Fraction Completed = portion of the action completed divided by the action's required duration; and

SCALE = user-supplied scaling factor.

Exhibit A-49 displays the effectiveness as a function of the fraction completed for various values of SCALE. When SCALE = 1, the effectiveness is a linear function of the fraction completed, as the exhibit shows. If the action is half completed (fraction completed = 0.5), then the effectiveness is also 0.5. When SCALE is greater than 1, the effectiveness for a given fraction completed drops. For example, when SCALE = 3, the effectiveness of a half-completed action is only 0.125.

The boundary conditions for effectiveness are satisfied, as displayed in Exhibit A-49. However, the value of SCALE allows the user to specify how the effectiveness behaves between the boundaries. A higher value for SCALE results in less effectiveness for a given fraction completed.

This basic relationship describing the effectiveness of response actions is used to simulate whether releases are prevented or delayed. If a response action is effective, it prevents a release from occurring. If it does not prevent the release, it may delay it. Calculations are made using the effectiveness estimate to simulate prevention and delay in two situations:

- a release is anticipated to occur while a response action is ongoing; and
- a response action is terminated.

Each situation is discussed below.

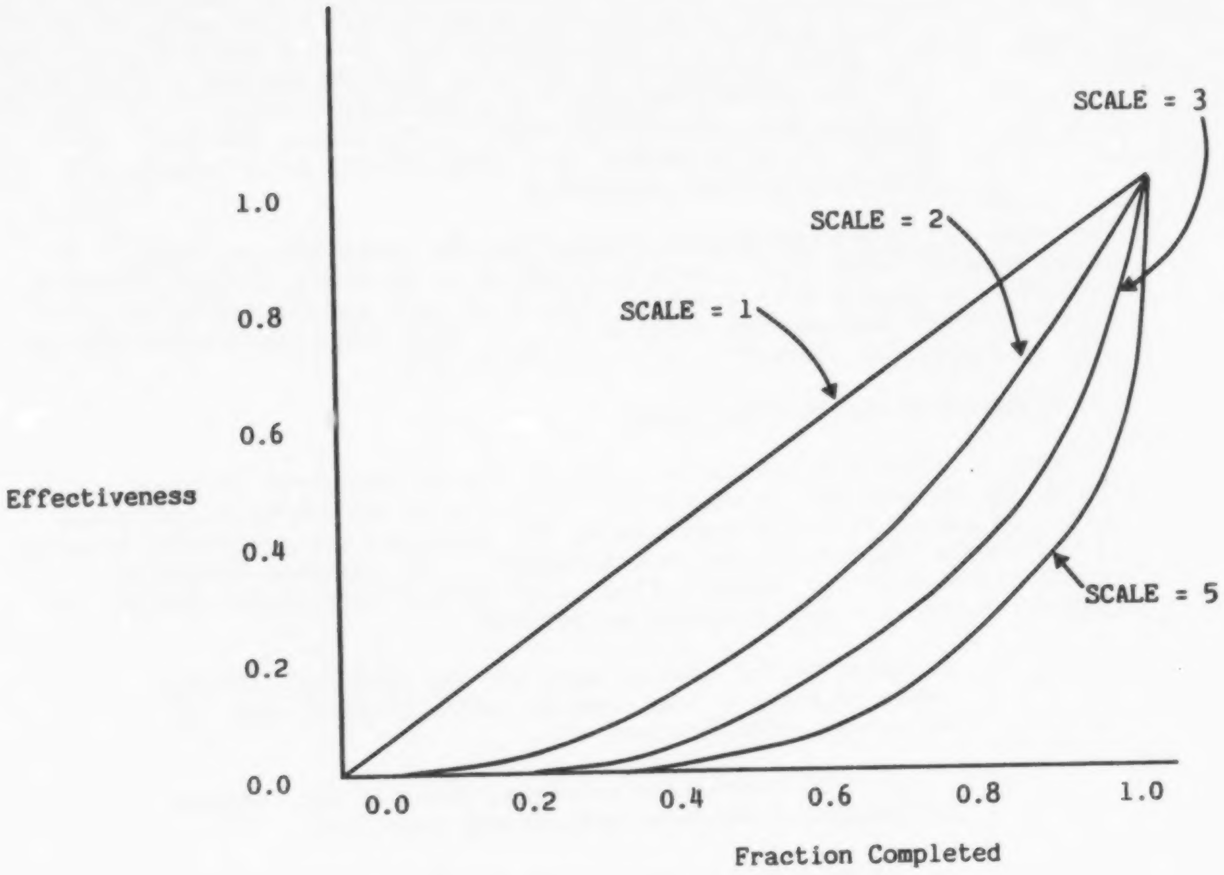
Release Anticipated While Response Action is Ongoing

When a release is anticipated to occur at a facility in a given year, all the response actions ongoing at the facility in that year are evaluated in terms of their effectiveness in preventing or delaying the release. The effectiveness of each response action is computed using the relationship described above. (Only those response actions defined as being capable of influencing the release are considered. This is a characteristic of each response action, as described in section A.2.4, Actions, and as displayed in Exhibit A-27.) The maximum effectiveness across the relevant response actions is then used.

For example, release type 6 (toxic consituents off site) may be anticipated to occur 40 years after the facility opens. However, in that year, two response actions may be ongoing (due to other releases detected earlier): fluid removal and treatment on site; and fluid removal and treatment off site. The first action may be one-quarter complete (25 out of 100 required years) and the second may be 10 percent complete (10 out of 100 required years). If SCALE is defined by the user to be 3, then the effectiveness of the two actions are 0.016 and 0.001, respectively (i.e., $0.016 = (0.25)^3$). The larger effectiveness, 0.016, is used.

EXHIBIT A-49

GRAPH OF EFFECTIVENESS AS A FUNCTION OF FRACTION COMPLETED FOR VARIOUS VALUES OF SCALE[1]



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[1] Effectiveness = (Fraction Completed)$^{\text{SCALE}}$.

This effectiveness is used as follows:

- A random number is drawn between zero and one. If the random number if less than the effectiveness (0.016), then the release is prevented.

- If the release is not prevented, it will be delayed. The amount of the delay is estimated by multiplying the effectiveness by the time it took the release to occur. In this example, the delay equals one year (0.016 x 40 = 0.6, which is rounded up to 1.0). This expression reflects the notions that: (1) the delay should increase with the effectiveness of the action and (2) the delay may be greater for those actions which took a long time to occur initially.

The result of this procedure is either that the release is no longer anticipated to occur (i.e., is prevented) or is delayed. If the release is delayed, the procedure is repeated when it is next anticipated to occur.[89] If the response actions are still ongoing at that time, their effectiveness will be higher and prevention will be more likely.

A Response Action Terminated

When a response action is terminated, the influence the response action had on future releases is evaluated. This evaluation cannot be performed until the action is terminated because the influence depends on the fraction of the action completed. The effectiveness of the response action is calculated as described above. This value is used to evaluate whether the response action prevents releases as follows:

- A random number between zero and one is drawn. If the random number is less than the effectiveness, then the action prevents releases.

- If the action prevents releases, then all the releases influenced by response actions are prevented.

- If the action does not prevent releases, then all the releases influenced by the response actions will be delayed.

The effectiveness estimate is used as the basis for simulating the delay of future releases. However, the estimate must be adjusted to reflect the proximity (in time) of the response action to the expected future release. If the release is expected far in the future, then the response action may have little influence on the underlying processes leading to the releases.

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[89] If the delay is less than one-half year, then the release occurs in the original year and is not delayed.

Alternatively, if the release were anticipated shortly after the termination of the response action, then the action was likely to have been in progress during the time when the release was occurring. Consequently, the response action may be expected to be effective in delaying the release.

To make the adjustment required for estimating delays, a new quantity was calculated: fraction of release remaining. This quantity reflects the portion of time which has passed relative to the total time it takes for the release to occur. For example, if the release was expected to take 50 years to occur, and if 40 years have passed, then the fraction of release remaining is 0.2, ((50-40){50). To estimate the delay, the effectiveness is reduced by this fraction, and the result is raised to the SCALE power, and then multiplied by the time it takes for the release to occur. If the effectiveness were 0.75 and SCALE is equal to 3, the delay in this example would be:

$$\text{Delay} = (0.75 - 0.20)^3 \times 50 = 8.3 \text{ years.}$$

Exhibit A-50 displays estimated delays for various values of SCALE, fraction completed, and fraction of release remaining. The exhibit shows the following:

- The greater the fraction completed, the higher the effectiveness and the longer the delays.
- Higher SCALE values have a substantial impact on delays. In order to produce long delays, the response action must be substantially complete, and the release must be fairly near if SCALE equals 3 or 5.
- The lower the fraction of release remaining, the greater the delay.

A.3.6 Legal Validity of Claims

Before third-party claims (personal injury, real property, economic loss)[90] can be allocated to the PCLTF or other funding sources, it is necessary to assess whether the claims are legally valid. Legal validity is a necessary condition for compensation. If a claim is not considered legally valid, the claimant has no right to compensation. The analysis described in this section provides the link between claims that are brought and claims that are allocated to the funding sources for compensation.

The legal validity of claims varies from state to state, depending on state statutes and accepted legal theories. To simulate the legal validity of

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[90] Natural resource damage claims are assumed always to be legally valid due to the statutory liability which CERCLA specifically establishes. Consequently, in the current simulations, natural resource damage claims are not subject to this legal validity requirement.

EXHIBIT A-50

DELAYS IN RELEASE DUE TO RESPONSE ACTIONS FOR VARIOUS VALUES OF SCALE, FRACTION COMPLETED, AND FRACTION OF RELEASE REMAINING

SCALE	FRACTION OF ACTION COMPLETED	FRACTION OF RELEASE REMAINING	TIME FOR RELEASE TO OCCUR (YEARS)	EFFECTIVENESS[1]	DELAY[2] (YEARS)
1	0.60	0.50	50	0.60	5.0
1	0.90	0.50	50	0.90	20.0
1	0.60	0.20	50	0.60	20.0
1	0.90	0.20	50	0.90	35.0
3	0.60	0.50	50	0.216	0.0
3	0.90	0.50	50	0.729	0.6
3	0.95	0.50	50	0.857	2.3
3	0.60	0.20	50	0.216	0.0
3	0.90	0.20	50	0.729	7.4
3	0.95	0.20	50	0.857	14.2
5	0.60	0.50	50	0.078	0.0
5	0.90	0.50	50	0.590	0.0
5	0.99	0.50	50	0.951	0.9
5	0.60	0.20	50	0.078	0.0
5	0.90	0.20	50	0.590	0.5
5	0.99	0.20	50	0.951	11.9

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[1] Calculated as: $(\text{Fraction of action completed})^{\text{SCALE}}$.

[2] Calculated as: $(\text{Effectiveness - Fraction of Release Remaining})^{\text{SCALE}}$ x (Time for Release to Occur).

claims in a manner reflecting the differences across states, we developed seven representative state liability regimes based on a review of existing state statutes and legal theories. Each representative liability regime is associated with a set of probabilities which reflects the likelihood that each of the third-party claim types will be legally valid. The seven regimes chosen represent the wide variety of legal liability regimes currently observed across the country.

We then estimated the frequency with which each liability regime exists today. We used the following data sources to develop the state liability regimes and to estimate their frequencies:

- ICF Incorporated, Review of State Liability Provisions, report to U.S. Environmental Protection Agency, June 1982;
- CERCLA Section 301(e) Report: Injuries and Damages from Hazardous Wastes -- Analysis and Improvement of Legal Remedies, U.S. GPO, 1982;
- Congressional Research Service, Six Case Studies of Compensation for Toxic Substances Pollution, prepared for the Senate Committee on Environment and Public Works, 96th Cong., 2nd S., U.S. GPO, 1980;
- W. Prosser, Law of Torts, West Publishing, 1971;
- Note, "Strict Liability for Generators, Transporters, and Disposers of Hazardous Waste," 64 Minnesota Law Review 949, 1980;
- Ginsberg & Weiss, "Common Law Liability for Toxic Torts: A Phantom Remedy," 9 Hofstra Law Review 859, 1981; and
- J. Trauberman, "Statutory Reform of 'Toxic Torts': Relieving Legal, Scientific, and Economic Burdens on the Chemical Victim," Environmental Law Institute, 1983.

Below, we first describe the seven representative state liability regimes. Then, we present our estimates of their frequencies. Finally, the procedure used in the Model to simulate the legal validity of claims is described.

Representative Liability Regimes

In order for a claim to be legally valid, it must be recoverable under an applicable liability rule. There are two sources of liability rules that apply to claims arising from hazardous waste disposal facilities: state statutes and state legal theories. There are two distinct types of statutory liability rules.[91] There are four types of applicable legal theories: strict liability, trespass, nuisance, and negligence.

To develop the representative liability regimes, we first assumed that injured persons may plead in the alternative, that is, they may seek compensation under a statute and one or more legal theories simultaneously. For example, a claim for personal injury could be based on strict liability, nuisance, and negligence; and although the claim based on strict liability might fail, recovery might be available under a nuisance or negligence theory. In general, the more liability rules that are applicable to a given claim, the greater the probability of recovery.

Second, we assumed that when claimants plead in the alternative, the likelihood of a claim being legally valid under one statute or legal theory is independent of the other statutes or legal theories being used and their likelihoods of legal validity. This allowed us to assume independent probabilities of legal validity for each statute and legal theory. These probabilities, which may vary by the type of release leading to the claim, are presented in Exhibit A-51.

Finally, the legal regimes were constructed by choosing combinations of the statutes and legal theories that may be available as the bases for seeking recovery (see Exhibit A-52). The probabilities of legal validity for each available basis for recovery were used to estimate an overall expected probability of legal validity for the regime. For example, if only the theories of trespass and negligence can be used as bases for seeking recovery from a detectable (but not toxic) release, the probability of legal validity (based in the values in Exhibit A-51) would be:

$$(0.40) + (1.0-0.40) \times (0.20) = 0.52$$

Exhibit A-53 lists the probabilities that each of the three claim types will be legally valid under each of seven state regimes by release type. Each regime is discussed in turn.

(1) Statutory Liability I. A state statute is assumed to apply to claims for personal injuries and real property damage. Recovery under the statute for these damages is available under all conditions, i.e., the probability of recovery is 100 percent. A negligence action is assumed to be the only liability theory that can be applied for recovering an economic loss. This assumption was made so that this legal regime would conform closely to known state laws.

(2) Statutory Liability II. A state statute is assumed to apply to claims for real property damage and economic loss; all such claims were assumed to be legally valid. The statute does not apply to personal injury.

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[91] ICF Incorporated, Review of State Liability Provisions, report to U.S. Environmental Protection Agency, June 1982.

EXHIBIT A-51

ASSUMED PROBABILITY OF LEGAL VALIDITY OF CLAIMS BROUGHT UNDER STATUTES AND LEGAL THEORIES

Basis for Seeking Recovery	Probability of Legal Validity (Reported in Percent)	
	Claims Due to Detectable Releases	Claims Due to Toxic Releases
State Statute	100	100
Strict Liability	60	67
Trespass	40	50
Nuisance	30	30
Negligence	20	30

Source: ICF estimates.

EXHIBIT A-52

STATUTES AND LEGAL THEORIES AVAILABLE AS BASES FOR RECOVERY FOR EACH LIABILITY REGIME IDENTIFIED BY CLAIM TYPE[1]

Liability Regime	Personal Injury Claims	Real Property Damage Claims	Economic Loss Claims
1. Statutory Liability I	STAT	STAT	NEGL
2. Statutory Liability II	TRES, NUIS, NEGL	STAT	STAT
3. Strict Liability I	STRL, TRES, NUIS, NEGL	STRL, TRES, NUIS, NEGL	TRES, NUIS, NEGL
4. Strict Liability II	STRL, TRES, NUIS, NEGL	STRL, TRES, NUIS, NEGL	STRL, TRES, NUIS, NEGL
5. Trespass	TRES, NEGL	TRES, NEGL	TRES, NEGL
6. Nuisance	NUIS, NEGL	NUIS, NEGL	NUIS, NEGL
7. Negligence	NEGL	NEGL	NEGL

---

[1] STAT = State statute available as a basis for recovery.
STRL = Strict liability available as a basis for recovery.
TRES = Trespass available as a basis for recovery.
NUIS = Nuisance available as a basis for recovery.
NEGL = Negligence available as a basis for recovery.

EXHIBIT A-53

PROBABILITY OF CLAIMS BEING LEGALLY VALID FOR EACH STATE LEGAL REGIME BY RELEASE TYPE
(Reported in Percent)

	Claims Due to Detectable Constituent			Claims Due to Toxic Constituents		
	Personal Injury	Real Property Damage	Economic Loss	Personal Injury	Real Property Damage	Economic Loss
Statutory Liability I	100	100	20	100	100	30
Statutory Liability II	66	100	100	79	100	100
Strict Liability I	86	86	66	92	92	79
Strict Liability II	86	86	86	92	92	92
Trespass	52	52	52	65	65	65
Nuisance	44	44	44	51	51	51
Negligence	20	20	20	30	30	30

Source: ICF Incorporated estimates.

Claimants can seek to recover for personal injuries under the legal theories of trespass, nuisance, and negligence.

(3) Strict Liability I. All four legal theories (strict liability, trespass, nuisance, and negligence) are assumed to apply to claims for personal injuries and real property damages. Claims for economic loss cannot be recovered under a strict liability theory, but can be recovered under the other three legal theories. Therefore, the probability of recovering for economic loss is slightly lower than for personal injury and real property damage.

(4) Strict Liability II. All four legal theories are assumed to apply to all damage claims. The probability of recovery is thus the same for personal injury, real property damage, and economic loss.

(5) Trespass. The legal theories of trespass and negligence are assumed to apply to all damage claims. Recovery is assumed to be unavailable under any state statute, strict liability theory, or a theory of nuisance.

(6) Nuisance. Only the legal theories of nuisance and negligence are assumed to apply to all damage claims.

(7) Negligence. All damage claims can be based on a negligence theory only.

It should be noted that our analysis does not include an assessment of the strategic behavior likely to be undertaken by harmed parties seeking relief for damages (harmed parties may overstate their losses in a strategic attempt to obtain favorable judgments). Thus, the percentages given in Exhibit A-53 relate to claims for the actual harms which people believed they have suffered, and not to any overstated claims that may be requested by individuals or groups seeking recovery. Because the PCLTF Model attempts to estimate claims for the actual harms people believe they have suffered, the question of strategic behavior on the part of harmed parties is implicitly assumed away. No apparent bias is introduced by this approach.

State Regime Frequencies

Our data sources revealed that two states have statutory liability rules roughly similar to the first state liability regime, Statutory Liabilty I, and two other states have rules similar to the second regime, Statutory Liability II. About two thirds of all states have liability rules similar to one of the strict liability regimes. A review of reported cases and the legal literature indicated that nuisance actions were more common than trespass actions. Furthermore, negligence bases for trespass and nuisance claims are included in those categories. On this basis, we estimated the frequencies with which the legal regimes are anticipated to occur among the states as:

- Statutory Liability I: 0.04;
- Statutory Liability II: 0.04;
- Strict Liability I: 0.30;
- Strict Liability II: 0.35;

- Trespass: 0.05;
- Nuisance: 0.15; and
- Negligence: 0.07.

Although the distribution of legal regimes is likely to change over time, we have made no attempt to predict future changes in these frequencies.

Simulating Legally Valid Claims

Using the state regimes and their frequencies, we simulated the legal validity of third-party claims for the PCLTF Model in the following manner:

1. For each of the lower 48 states, assign one of the seven liability regimes using the frequency distribution described above. The Model is designed so that the user can specify liability regimes for particular states as he or she so desires. In the absence of user-supplied inputs, each state is randomly assigned a regime for each iteration.

2. When any third-party claim arises, identify the release type leading to the claim and the state in which the release occured.

3. Based on the liability regime in the identified state and the release type, identify the probability of legal validity for each claim type (i.e., the probability from Exhibit A-53).

4. Simulate whether each claim is legally valid by drawing a random number and comparing this number to the probability of legal validity. If the claim is legally valid, it is then allocated to one of the funding sources. If it is not, then the quantity is kept track of separately and is not allocated. The Model output summarizes the extent to which each claim type is found to be legally valid.

APPENDIX B

RELEASE SIMULATION MODEL

This appendix describes the Release Simulation Model. This model simulates the movement of water into and out of chemical waste disposal sites by characterizing the site and its immediate environment in terms of those properties that affect hydrologic transport. A Monte Carlo simulation technique is employed to describe predicted weather patterns. Subsequent precipitation is followed through runoff, evapotranspiration, and infiltration using a simple water balance approach. Leakage into the waste is assumed to dissolve contaminants to their point of solubility. The resultant leachate is then tracked as it progresses through the unsaturated zone and into the aquifer. Transport velocity and plume dimensions are estimated using an area source three-dimensional transport equation that models dispersion in two dimensions (i.e., horizontal plane) and assumes a uniform concentration in the vertical dimension. Releases are defined as seven discreet incidents where detectable or toxic levels of contaminants arrive at a monitoring or potable well, or overflow across the land surface.

B.1 MODEL METHODOLOGY

The design of the failure/exposure prediction elements of the Release Simulation Model is illustrated in Exhibit B-1. In essence, the functional components rely on user-supplied data, data held within captive data banks, programmed analytical constructs for predicting continuous events (e.g., leachate movement), and Monte Carlo simulations to predict probabilistic events (e.g., rainfall patterns). The individual algorithms employed, data sources, and assumptions made in developing each structural component of the model are discussed in the following sections.

B.1.1 User-Supplied Inputs and Default Values

At the beginning of a simulation, the user supplies a baseline set of input information. This baseline information is supplemented by internally-generated values to create the required data set outlined in Exhibit B-2. In addition, default values have been programmed into the model which can be utilized whenever the user does not supply a value. Some inputs are self-explanatory; those that are not self-explanatory are discussed in this section with respect to their use and default values, when appropriate.

1. Type of Site

Each site is characterized by:

- Number of layers;
- Thickness of each layer (in cm);
- Field capacity of each layer (in cm);

EXHIBIT B-I

RELATIONSHIP OF COMPONENTS IN RELEASE SIMULATION MODEL

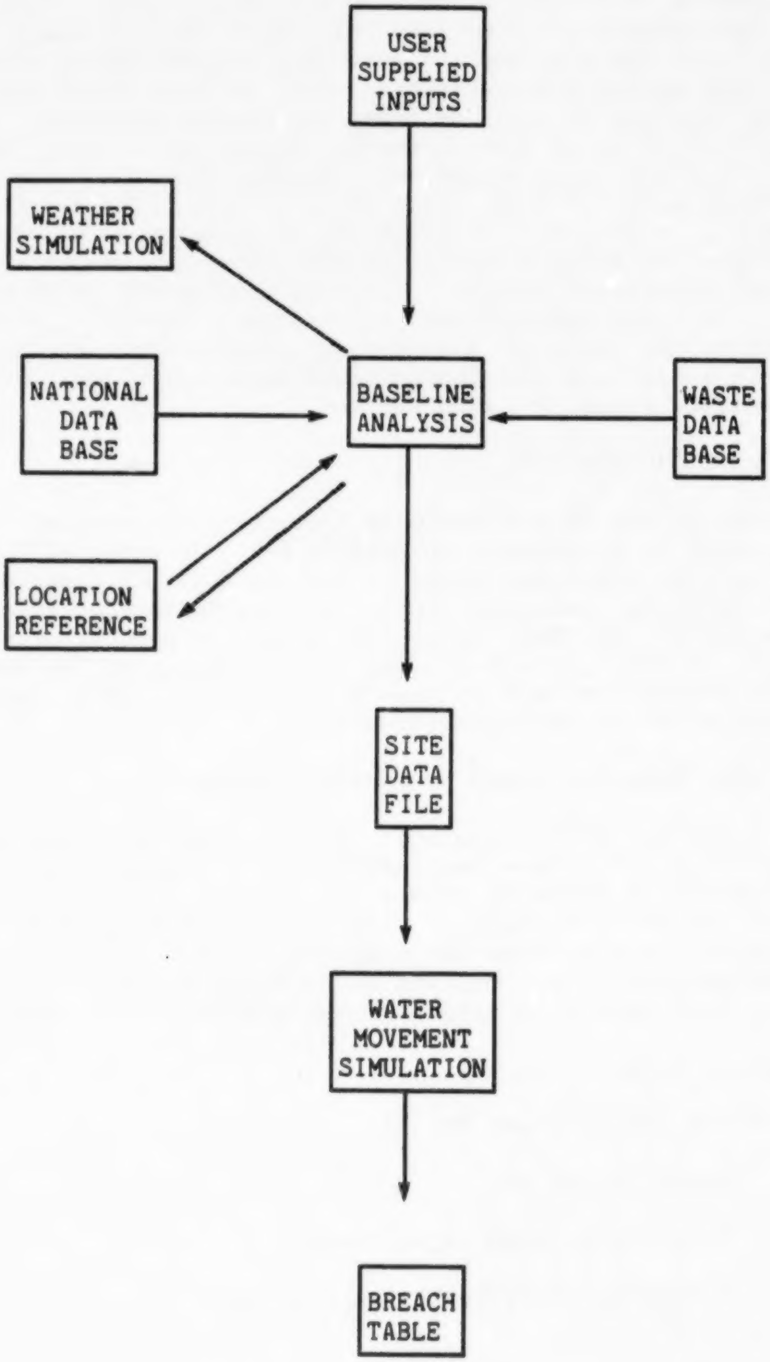
USER SUPPLIED INPUTS
WEATHER SIMULATION
NATIONAL DATA BASE
BASELINE ANALYSIS
WASTE DATA BASE
LOCATION REFERENCE
SITE DATA FILE
WATER MOVEMENT SIMULATION
BREACH TABLE

EXHIBIT B-2

USER-SUPPLIED INPUTS FOR RELEASE SIMULATION MODEL

USER INPUTS NEEDED AT THE START OF A RUN:

- Number of sites
- Number of Monte Carlo replications
- Base year (i.e., the time origin for the run)
- Starting "random" number seed(s)

VARIABLES THAT THE USER CAN RESET AT THE START OF A RUN:

- Probability that a synthetic liner fails during a given month (Default value based on expected life of 25 years)
- Probability that a synthetic liner fails at time zero (Default value: 0.25)
- Probability that a synthetic cover fails during a given month (Default value based on expected life of 50 years)
- Probability that a synthetic cover fails at time zero (Default value: 0.05)
- Amount of water that defines a breach when the monitoring is done inside the site

FOR EACH SITE OR FACILITY, THE USER MUST DEFINE THE FOLLOWING:

- Site type (if the user picks one of the standard site types, then the thickness, field capacity,[1] saturation, starting water content,[2] probabilities of synthetic liner failure, number of layers, type of layers (e.g. clay, sand, etc.), drainage, and Type 1 breach flags are obtained from an internal data base; if the user does not pick one of these standard types, he must supply his own values).

- Latitude and longitude

- Number of wastes in the site and an EPA waste code for each waste

- Date opened and closed

- Date when post-closure care ceases

- Date on which study ends for this site

---

[1] Field capacity refers to the amount of moisture a medium will hold after the layer has been drained.

[2] Starting water content refers to the initial amount of moisture in the layer.

EXHIBIT B-2 (continued)

USER-SUPPLIED INPUTS FOR RELEASE SIMULATION MODEL

- Type of waste package (drum or sludge)
- Width
- Length
- Distance to the monitoring well (which will be set to 1 meter if monitoring is to be done at the site boundary)

THE COMPUTER WILL SUPPLY ALL OTHER VARIABLES. THE USER, HOWEVER, CAN OVERRULE THE COMPUTER AND SUPPLY ALTERNATIVE VALUES FOR THE FOLLOWING:

- Seepage velocity range -- i.e., the velocity range of the aquifer (speed at which the groundwater is moving)
- Distance to drinking water well and/or surface water
- Use of the Blaney-Criddle Method over the Thornthwaite Method to characterize evapotranspiration (if the user chooses this option, he must also supply all the parameters needed by the Blaney-Criddle Method)
- Runoff coefficients -- i.e., the fraction of precipitation that runs off the surface rather than infiltrates into the soil
- Erosion
- Effective porosity range -- i.e., the range of values defining pore or void space in the soil; this is the space between soil particles through which soil moisture can flow
- Range of depth to groundwater
- Field capacity of the topsoil
- Amount of water that defines a breach at a monitoring location when the monitoring well is at the perimeter
- Random number seeds for the climate calculations
- Total dissolved solids and total organic carbon content of the uppermost aquifer
- Thickness of the aquifer

- Saturation for each layer (in cm) -- i.e., amount of water that can be received by a layer before it overflows or backs up into the layer above;
- Probability that synthetic liners/caps will fail in any given month; and
- Probability that synthetic liner/cap is punctured at time zero.

The first four of these characteristics can either be supplied by the user or obtained from an internal data base. To use the latter option, the user must identify the site as one of seven standard designs. An identifier for each layer is assigned to designate the material type: waste-1, sand-2, clay-3, synthetic (e.g., plastic, asphalt, concrete)-4, soil-5. A separate identifier is used to denote the presence of a leachate collection system that would prevent the upper soil layers from becoming saturated.

The seven design types are summarized in Exhibit B-3. These prototype designs are defined by the material and thickness of the layers underlying the site. The designs are representative of the series of layers for surface impoundments and landfills.

As the footnotes to Exhibit B-3 explain, unlined surface impoundments and landfills are modeled with underlying clay layers with a large minimum permeability of 10^{-7} m/sec. This permeability is large enough so that in general, the amount of water leaving the site is controlled by the amount of moisture available from the infiltration of rainfall, rather than the liner's permeability. Consequently, although clay layers are used in modeling the unlined prototype designs, the layers play virtually no role in containing the wastes in the facilities.

Prototype designs 3, 4 and 5 were developed to represent landfills. However, because releases at facilities with these designs may be less influenced by the additional hydraulic pressure from the standing water in surface impoundments during its operation, these designs were also used to represent surface impoundments.

Latitude and longitude are used to specify the location of the site. This allows data to be drawn from the National Data Base for the appropriate region of the country and thus ensures the proper consideration of site-specific features.

2. Waste Codes

The waste in each site is identified by EPA waste codes. Although the code designation provides no input that is directly applicable to subsequent analyses, it does identify a discrete waste type. This waste type is then used to specify toxic constituents and their properties that will affect the waste type's transport and fate in the environment.

EXHIBIT B-3

MATERIALS USED IN SEVEN PROTOTYPE DESIGNS

PROTOTYPE DESIGN	PROCESSES MODELED WITH DESIGN	LAYERS AND THEIR THICKNESS IN CM (Top to Bottom)										
		1	2	3	4	5	6	7	8	9	10	11
1	Unlined Surface Impoundment	Soil 61.0	Sand 30.5	Clay[3] 61.0	Waste 91.5	--[1] --						
2	Clay-Lined Surface Impoundment	Soil 61.0	Sand 30.5	Clay[3] 61.0	Waste 91.5	Clay[2] 91.5						
3	Landfill, Surface Impoundment	Soil 61.0	Sand 30.5	Plastic 0.005	Sand 15.2	Clay[3] 61.0	Waste 600.0	Sand 30.5	Plastic 0.20	Sand 15.2		
4	Landfill, Surface Impoundment	Soil 61.0	Sand 30.5	Plastic 0.005	Clay[3] 61.0	Waste 600.0	Sand 30.5	Plastic 0.005	Sand 30.5	Plastic 0.20		
5	Landfill, Surface Impoundment	Soil 61.0	Clay[3] 91.5	Plastic 0.005	Sand 30.5	Plastic 0.005	Clay[3] 30.5	Waste 600.0	Sand 30.5	Clay[3] 61.0	Plastic 0.008	Clay[3] 15.2
6	Unlined Landfill	Soil 61.0	Sand 30.5	Clay[3] 61.0	Waste 600.0	--[4] --						
7	Clay-Lined Landfill	Soil 61.0	Sand 30.5	Clay[3] 61.0	Waste 600.0	Clay[5] 91.5						

---

[1] A 91.5 cm thick clay layer with hydraulic conductivity of 10-7 m/sec was used as the bottom layer. Due to the standing water in the surface impoundment during operation, the effective hydraulic conductivity of this layer was modeled as 2x10-7 m/sec, which yields a minimum flow of 51.8 cm of water per month (assuming that much water is available to flow through the facility).

[2] Hydraulic conductivity of the layer assumed to be 10-8 m/sec. Due to standing water during operation, the effective hydraulic conductivity is 2x10-8 m/sec, which yields a minimum flow of 5.18 cm of water per month (assuming that much water is available to flow through the facility).

[3] Hydraulic conductivity of the layer assumed to exceed 10-9 m/sec.

[4] A 91.5 cm thick clay layer with hydraulic conductivity of 10-7 m/sec was used as the bottom layer. This yields a minimum flow of 25.9 cm of water per month (assuming that much water is available to flow through the facility).

[5] Hydraulic conductivity of the layer assumed to be 10-8 m/sec. This yields a minimum flow of 2.59 cm of water per month (assuming that much water is available to flow through the site).

3. Opening and Closure Dates

Opening and closure dates are specified to indicate: (1) when the face is first opened and, therefore, able to collect precipitation; (2) how long the face is open; and (3) when the cap is emplaced. Leachate migration is tracked from the site's opening date. The date when post-closure care is terminated is equated with the time when leachate collection is terminated and erosion is allowed to proceed unabated. This assumption may be changed by the user to reflect both the continued maintenance of the cap after the period of owner/operator responsibility and the possibility that leachate collection may cease when the cap is emplaced.

Leachate generation and migration will begin when the site opens, as will the aging process for any synthetic liners. Infiltration waters will accumulate at a faster rate while the site is in operation because of the lack of a low-permeability cap. After closure, the cap will be in place and infiltration will be reduced. Because leachate migration can be substantial during operation, it must be tracked from the opening date.

4. Length of Run

The length of run is specified by the user upon activating the model. This is the period of time following facility opening (i.e., following when the facility begins accepting waste for disposal) that the model will check for breaches.

5. Probability of Liner Failure

The probability of liner failure refers to the density function employed in determining when a synthetic membrane liner is likely to fail because of natural degradation. This function is separate from the probability of failure resulting from improper installation or puncture during site operation (i.e., failure at time zero). Liner failure addresses the limits placed on the life of a properly-installed membrane as a result of chemical degradation and natural forces. The user may specify a value for this probability or may rely on the following default values: an average life of 25 years for synthetic membrane liners and 50 years for synthetic membrane covers. The probability of sudden breaches in soil liners is assumed to be zero.

B.I.2 Internally Stored Inputs

In addition to inputs supplied by the user, the Release Simulation Model requires waste- and geography-specific inputs in order to conduct the analysis. These inputs are stored in a data base internal to the Model.

1. Waste-Specific Data

The EPA waste identifier codes specify the waste type or source. For the analysis here, information is required on the constituents of wastes and their properties with respect to their transport and fate in the environment.

For each waste code, toxic constitutents were identified for the purpose of modeling breaches. Constituents were selected by reviewing EPA regulatory documents[1] and a draft report by MITRE.[2] These documents list the most hazardous constituents for each waste code.

For each of the identified toxic constituents, the following data were compiled: solubility, drinking water or priority pollutant criteria levels, detection limit, octanol-water partition coefficient (organics),[3] and Kd values (inorganics).[4] With respect to toxicity criteria based on carcinogenesis, the 10^{-6} risk level value was used.[5] These physical constants were derived from the "Background Document-Listing of Hazardous Wastes," op. cit., and its reference material.[6] Only those constituents with primary drinking water standards or designated priority pollutant criteria were considered for the purpose of determining a toxic breach.

Average detection limits of 10 μg/l for organics and 20 μg/l for inorganics were assumed, based on EPA guidelines.[7] These detection limits assume that monitoring programs will use gas chromatography/mass spectrometry (GC-MS) analyses for organics and inductively coupled plasma emission spectrometry (ICP) for inorganics.

In addition, data are entered on the taste and odor threshold, the total dissolved solids (TDS), and total organic carbon (TOC) levels associated with all constituents in each waste. These quantities denote when organoleptic properties or an indicator parameter would lead to the detection of leakage in potable or monitoring wells, respectively.

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[1] U.S. Environmental Protection Agency, "Background Document-Listing of Hazardous Wastes," November 14, 1980.

[2] MITRE Corporation, "Composition of Selected Hazardous Waste Streams," prepared under Contract 68-01-6092.

[3] An octanol-water partition coefficient represents the degree to which a chemical will distribute itself between water and octanol when shaken in a mixture of the two. It is used as a measure of a chemical's affinity for water as opposed to organic fluids.

[4] "Kd" is a parameter used to represent the distribution of a chemical between water and soil particles.

[5] The 10^{-6} risk level is defined as the concentration at which exposure over a lifetime (70 years) would result in one additional case of cancer in 10^6 people.

[6] Dawson, G. W., C. J. English, and S. E. Petty, "Physical-Chemical Properties of Hazardous Waste Constitutents," U.S. EPA, March 5, 1980.

[7] "Guidelines Establishing Test Procedures for the Analysis of Pollutants; Proposed Regulations." Federal Register, 69464-69575, December 3, 1979.

The detection of a breach is based on the arrival of mobile species at the point of detection. Therefore, the most important constituent(s) in each waste will be the "early arrival" contaminant(s), i.e., those constituents that arrive first at the monitoring or potable well or a surface water in detectable or toxic concentrations. Recognizing this, a representative chemical(s) is identified for each waste code for the purposes of subsequent transport modeling. This identification was accomplished by comparing the solubility, detection limit, and toxicity criteria for the various chemicals with data on their potential interactions with soil (e.g., attenuation). For consideration of breaches defined by the arrival of detectable levels, the ratio of the solubility (S) to the detection limit (DL) was calculated to indicate the amount of dilution and attenuation necessary for each constituent below which leachate will not produce a detectable level at the point of observation (it is assumed that all constituents are leached from the site at their water solubility). DL may constitute the indicator parameter level, the chemical analysis level, or the taste and odor threshold.

Similarly, for breaches defined by toxicity considerations, the ratio of the solubility (S) to the toxicity criteria (TC) was derived to indicate the level of dilution and attenuation necessary to prevent a toxic level from occurring at the point of observation. For organic chemicals, the octanol-water partition coefficient (P) is converted into a Koc[8] using the Karichoff relation (log Koc = 0.02 + 0.94 log P).[9] This relation is subsequently employed to calculate a Kd (soil-water partition coefficient) for organic contaminants, assuming an average soil organic content of 2 percent. Kd values are used directly in subsequent modeling algorithms to designate soil attenuation. A Kd value is also specified to indicate soil attenuation for inorganic constituents.

For each waste code, the values (Log (S/DL) - Log (Kd)) and (Log (S/TC) - Log (Kd)) were calculated for each constitutent. The constituents yielding the highest values were designated as "early arrival" contaminants for use in subsequent analyses because they will move through the environment most rapidly. Therefore, the one or two constituents with the highest values are used to designate the properties of a given waste type. For a site receiving more than one waste, the values of each constituent are compared and the constituents that move most rapidly through the environment are used for subsequent modeling. Thus, transport and concentration that result in a

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[8] "Koc" is the distribution coefficient adjusted to the organic carbon content of the soil.

$$\text{Koc} = \frac{\text{concentration of organic carbon in soil}}{\text{concentration in water}}$$

[9] See W. B. Neely, Chemicals in the Environment, Marcel Dekker, New York.

breach will be based on up to four contaminants (one each for indicator parameters, taste and odor, chemical detection, and toxicity). In essence, this process reduces the modeling effort to one of following the "early arrival" toxic constituents.

No degradation is accounted for in the transport model. It is assumed that groundwater is abiotic (i.e., has no active biological community as a result of filtration of bacteria by the soil and potential toxicity of leachate) and, therefore, does not subject contaminants to biodegradation. Photodegradation (decomposition sponsored by the presence of light, e.g., sunlight) is also eliminated in groundwater systems. Hydrolysis and chemical oxidation may still occur, but because the worst-case contaminants are of primary interest, constitutents with significant degradation rates are not retained as indicator chemicals.

In addition, wastes are characterized by the number of compound classes present among inorganic, polar organic, and nonpolar organic chemicals. This is done to assist in predicting liner failure. Synthetic membrane liners are often compatible with only one of these three classes of chemicals. Therefore, synthetic membrane liner life can be expected to be reduced if more than one class of chemicals is present. Finally, a flag is added to any waste containing carcinogenic constituents. Thus, when a potable well or surface water is contaminated at toxic levels, the model output indicates whether carcinogens are involved.

2. Geography-Specific Data

The National Data Base houses site-specific data on environmental factors, including pertinent hydrogeological, geological, and meterological data registered by longitude and latitude. When a site is identified by its geographic coordinates, the National Data Base can supply the appropriate environmental data. Specific parameters included in this data base are listed in Exhibit B-4.

Temperature data are used to determine losses of water from a site as a result of evapotranspiration. Historic monthly temperature pattern data have been obtained from the National Climatic Center for all first-order weather stations based on 40 years of records. For each site, the closest weather station is used to provide an estimate of temperature for any given set of coordinates in the lower 48 states. Historic monthly precipitation data were obtained in the same manner to determine infiltration.

The length of time a breach requires to reach the underlying aquifer will depend in part on the depth of the aquifer, because it takes longer for leachate to travel to deeper water tables. Hence, data from United States Geological Survey and American Water Wells Association publications and resources maps have been integrated into a single data set, which will provide a range of depths to a potable aquifer for any set of coordinates.

EXHIBIT B-4

INPUTS INCLUDED IN THE NATIONAL DATA BASE

Temperature Profile (°C) - density curve drawn from historic data

Precipitation Profile (cm/mo) - density curve drawn from historic data

Depth to Groundwater (cm)

Hydraulic Conductivity (cm/sec)

Ratio Gradient/Porosity (dimensionless)

Distance to Drinking Water Well or Surface Water (cm)

Overburden Field Capacity (cm/cm)

Erosion Loss Rate (cm/mo)

Runoff Coefficient (dimensionless)

Aquifer Water Quality (mg/l)

Aquifer Thickness (cm)

Subsequent transport of the plume in the aquifer will depend on the aquifer's hydraulic conductivity, porosity, and gradient. To create a comparable data base for these aquifer properties, Water Atlas[10] data on the aquifer type in each of twelve major groundwater regions of the lower 48 states (see Exhibit B-5) were integrated with data from Fugro, Inc.,[11] Heath,[12] and the EPA surface impoundment survey.[13] Correlations were made with typical permeability, porosity, and slope information for the soil/rock types to estimate a velocity range for each aquifer.

The National Data Base is both general and broad in scope. More specific data have been found for some aquifer properties. In particular, EPA's surface impoundment survey provides more specific values for depth to groundwater for some 1,200 data points shown in Exhibit B-6. These values are used when a site lies within the same 7.5 minute grid as one of the data points. Finally, if the user has site-specific data, they may be used in place of the values normally provided by the National Data Base.

Overburden field capacity is used to determine how much moisture the soil will hold before the water moves to the next layer. Starting with the assumption that overburden for a particular facility is taken from surface soils near that site, soil groups from the United States Department of Agriculture's generalized soil map were matched with representative soils and relevant taxonomic data were reviewed to determine the one-third bar moisture content.[14] For highly sandy soils, the fifteenth-bar value was employed. This value is roughly comparable to field capacity, since it is a measure of moisture content at reduced pressure. The resulting designation of field capacity values is provided in Exhibit B-7.

Erosion loss rates are used to determine stresses put on the facility cap. State-by-state values for average anticipated erosion were extracted

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[10] Geraghty, Miller, Van Der Leeden, and Troise, "Water Atlas of the United States," Water Information Center Publication, Post Washington, New York.

[11] Fugro, Inc., "Survey of Potentially High Yield Aquifers Within the Contiguous United States," Project No. 75-073-EG. Prepared for Battelle-Northwest, 1975.

[12] Heath, R.C., "Classification of Groundwater Systems of the United States," Groundwater, Vol. 20, No. 4, July-August, 1982.

[13] U.S. Environmental Protection Agency, "Surface Impoundments and Their Effects on Groundwater Quality in the United States -- A Preliminary Survey," EPA 510/9-78-005, June 1978.

[14] Soil Taxonomy, Agriculture Handbook 436. Washington, D.C.: U.S. Department of Agriculture, 1975.

EXHIBIT B-5

TWELVE MAJOR GROUNDWATER REGIONS OF THE UNITED STATES, EXCEPT ALASKA AND HAWAII

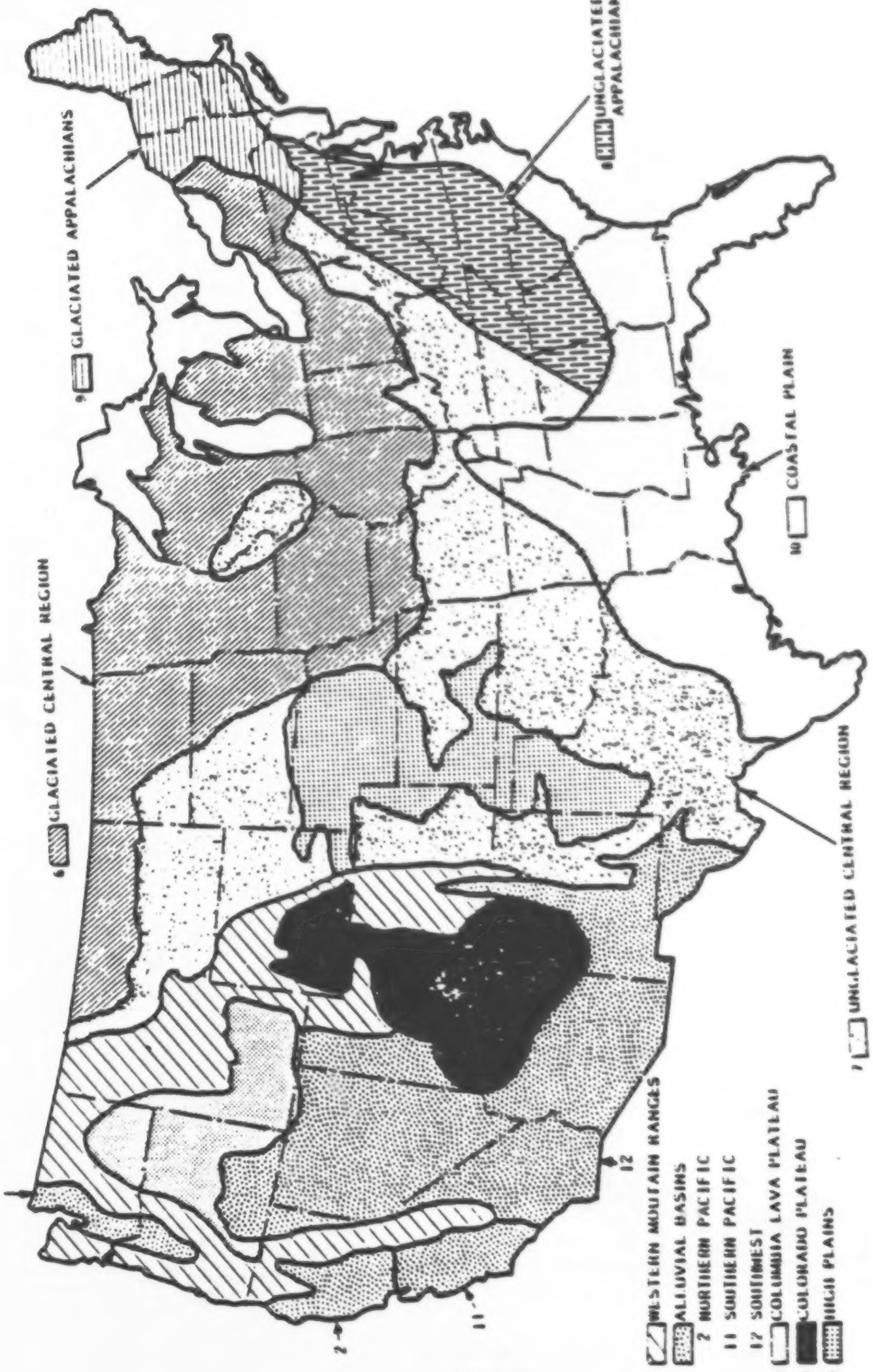
9 GLACIATED APPALACHIANS
8 UNGLACIATED APPALACHIANS
6 GLACIATED CENTRAL REGION
10 COASTAL PLAIN
7 UNGLACIATED CENTRAL REGION
1 WESTERN MOUTAIN RANGES
ALLUVIAL BASINS
2 NORTHERN PACIFIC
11 SOUTHERN PACIFIC
12 SOUTHWEST
3 COLUMBIA LAVA PLATEAU
4 COLORADO PLATEAU
5 HIGH PLAINS
2
2
11
12

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EXHIBIT B-6

LOCATION OF SPECIFIC DEPTH TO GROUNDWATER VALUES

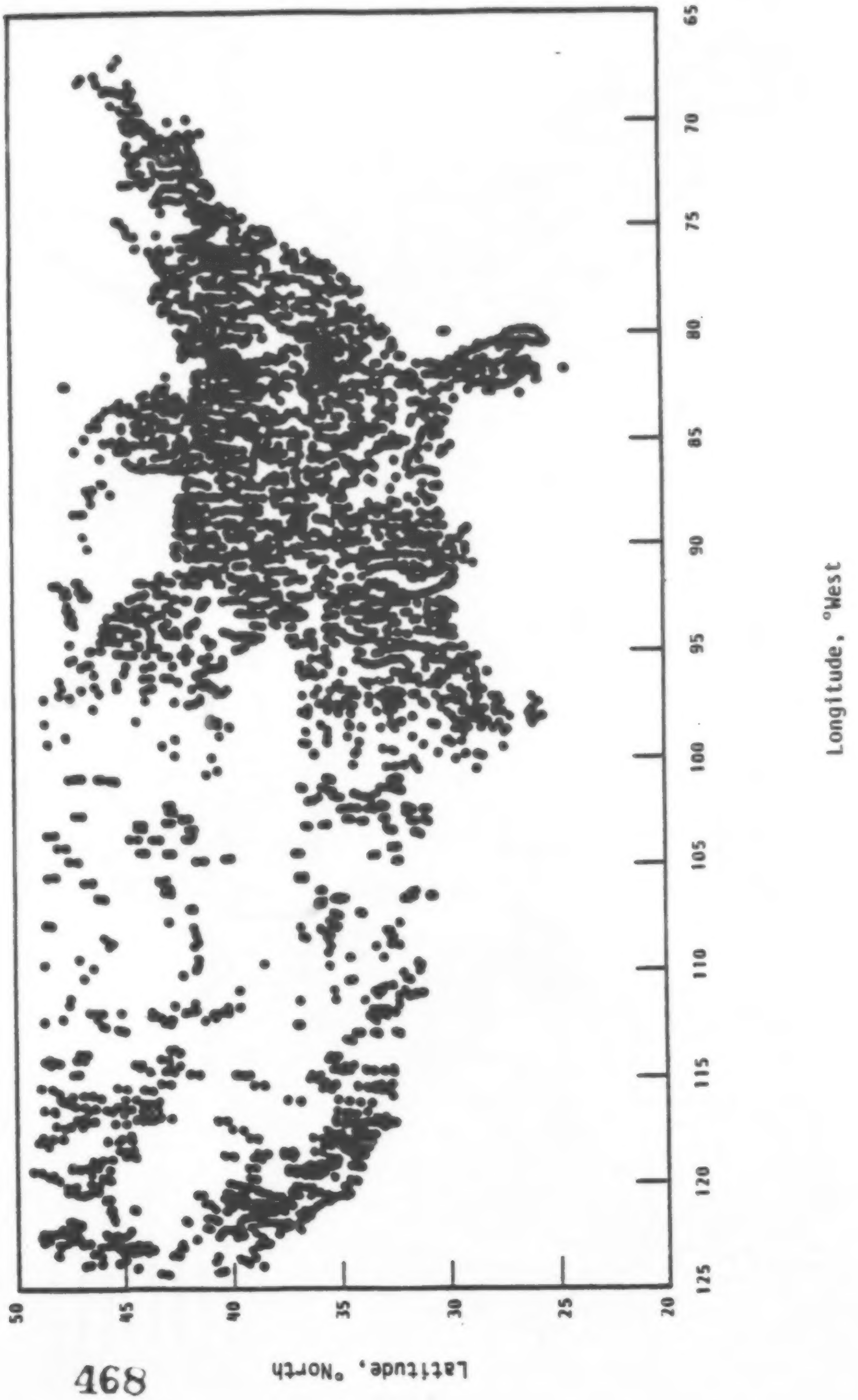
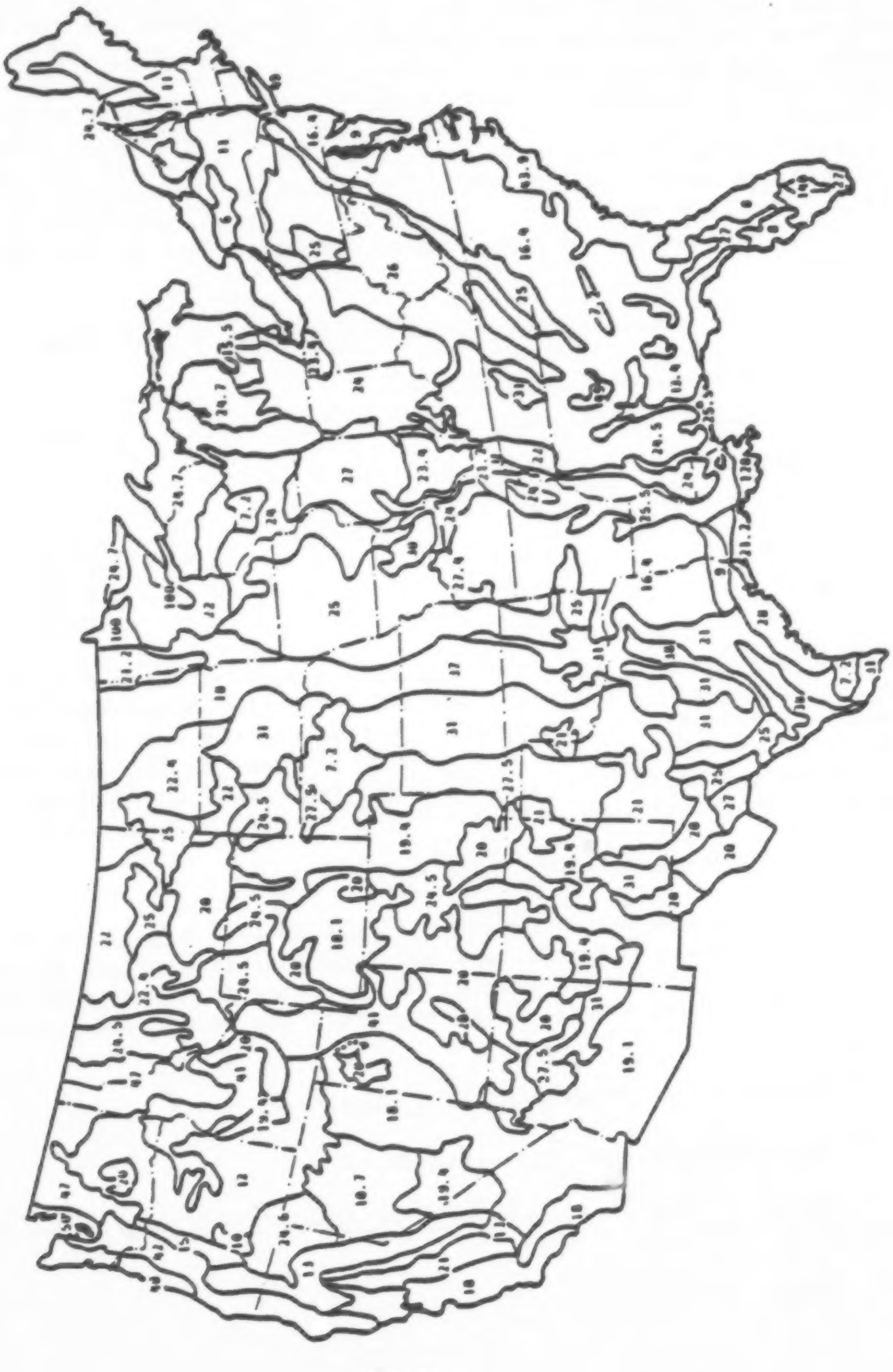

50
45
40
35
30
25
20
Latitude, °North
65
70
75
80
85
90
95
100
105
110
115
120
125
Longitude, °West

EXHIBIT B-7

FIELD CAPACITY VALUES FOR SURFACE SOILS
(percent dry weight of soil)



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best available copy.

from the National Resource Inventory (NRI)[15] and added to the National Data Base. These values, provided in Exhibit B-8, represent the lowest reported value for cultivated hay fields.

Runoff characteristics were used in determining infiltration at a site. Runoff coefficients were derived on the basis of soil type, antecedent rainfall, and season. First, four soil groups (shown for the U.S. in Exhibit B-9) were developed from the USDA generalized soil map[16] by matching soil series names and soil groups.[17] The antecedent moisture condition was then calculated by dividing the average monthly rainfall value by six to determine a five-day average value. The appropriate rainfall runoff fraction was derived[18] using the median value from rainfall events in the range 0 to 8 inches. The runoff coefficient differs between the growing and dormant seasons for each soil group. The following values are based on conditions expected in pasture land kept in good condition with an average slope of 2-5 percent:

Runoff Coefficient for Hydrologic Soil Group

5-Day Antecedent Rainfall (inches)		A	B	C	D
Dormant (10/1 to 3/31)	Growing (4/1 to 9/30)				
0.5	1.4	0.0	0.01	0.10	0.15
0.5 - 1.1	1.4 - 2.1	0.01	0.15	0.35	0.45
1.1	2.1	0.15	0.45	0.65	0.75

The National Data Base also includes a cross-reference file identifying the FIPS code and latitude and longitude for the county seat for all counties. This file was necessary to register the erosion loss data identified by FIPS code; it was retained as part of the data base to facilitate the addition of new data not registered by longitude and latitude and to locate sites when only the county or FIPS code is given.

B.1.3 Relationships and Functions

The failure prediction provided in the Release Simulation Model is carried out through a number of relations and functions as provided by the elements or submodels entitled Weather Simulation, Baseline Analysis, Site Data File, and Water Movement Simulation. These submodels are illustrated in Exhibit B-1.

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[15] United States Department of Agriculture.

[16] Soil Taxonomy, op. cit., Figure 41.

[17] See V. T. Chow, ed., Handbook of Applied Hydrology. New York: McGraw-Hill, 1964, Table 21-8.

[18] Ibid., Figure 21-6.

EXHIBIT B-8

ANNUAL EROSION LOSS (tons/acres)

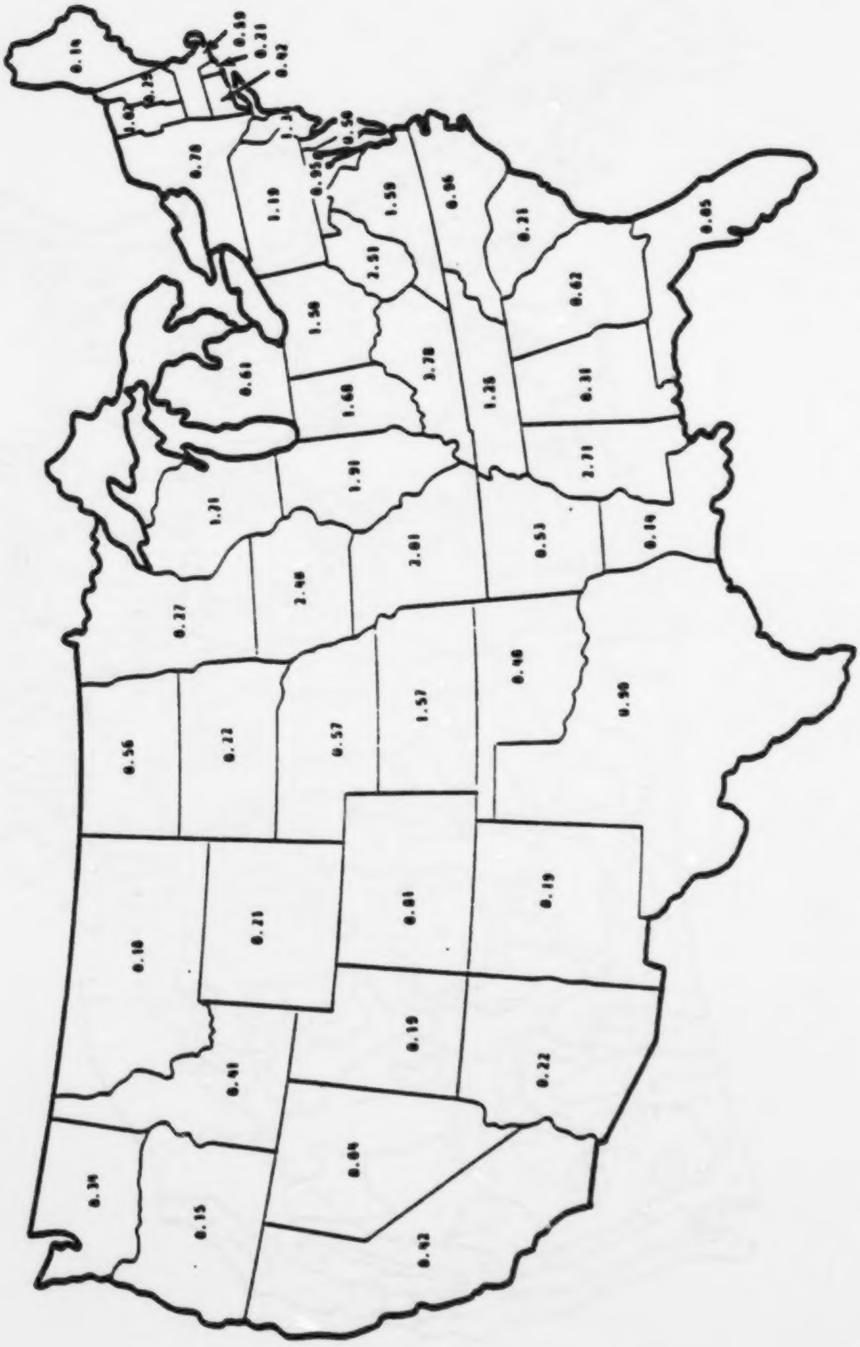
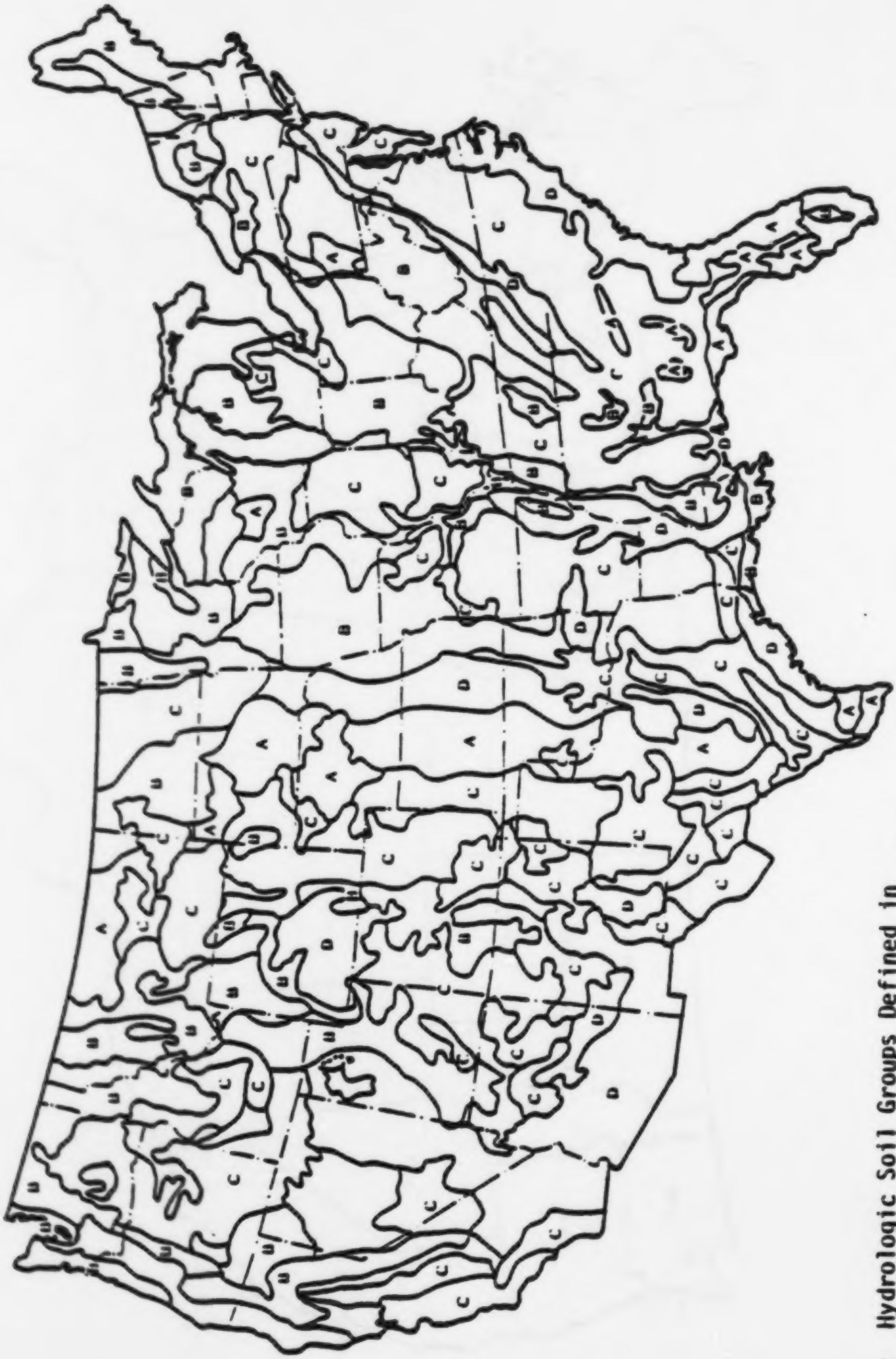

0.14
0.25
1.07
0.59
0.21
0.42
0.50
0.95
0.70
1.10
1.59
0.96
0.21
0.05
2.51
0.42
1.56
3.78
0.61
1.60
1.26
0.31
1.91
2.71
1.21
2.01
0.53
0.14
2.98
0.27
0.48
0.90
0.56
0.22
0.57
1.57
0.81
0.19
0.10
0.21
0.19
0.22
0.91
0.04
0.34
0.15
0.92

EXHIBIT B-9

HYDROLOGIC SOIL GROUPS



NOTE: Hydrologic Soil Groups Defined in Section 3.3.2.2, Runoff Characteristics

1. Weather Simulation

The weather simulation component utilizes a random draw or "Monte Carlo" technique. The historic distribution of temperature and precipitation are recreated in a density function of probable occurrences for each month of the year. A first-order linear congruential pseudo-random number generator is then employed to select a value for each month of the simulation. This process is repeated for each of the primary weather stations in the U.S.; the same weather pattern is simulated for all sites in the proximity of any given weather station. The entire weather pattern for a simulation can be retained by putting the starting draw number in memory, from which an identical series can be generated by the program package. The output from the weather simulation is ultimately employed to calculate monthly precipitation and evapotranspiration losses at a site. Because the density function is recreated from historic data, the potential for sustained wet or dry periods, droughts, etc. is maintained in proportion to past occurrences. This prevents the draw from making each month's weather totally independent from the previous month.

2. Baseline Analysis

The baseline analysis element assembles all pertinent inputs for a given site. In addition to data supplied by the user and data drawn from the waste and national data bases, the baseline element provides the starting water content of a facility. Water content is determined by assuming that all infiltration during the operational period enters the system (i.e., no plants are present to sponsor evapotranspiration, and evaporation is insignificant). Water is then distributed throughout the site's soil layers in a manner described in the section below on water movement simulation.

3. Site Data File

The site data file stores the integrated and calculated data inputs from the baseline analysis for a given site.

4. Water Movement Simulation

The water movement simulation submodule is the heart of the breach development mechanism. This unit models the infiltration of precipitation and the subsequent migration of leachate to the point of detection. Because of the random nature of initiating and contributing events, the simulation relies on Monte Carlo techniques. This process begins by accounting for uncertainties in seepage velocities, and dispersion values by drawing values from density curves. These values are used for the rest of the simulation.

Having established the initial conditions at a site by either:

- reading values in from the data base,
- letting the user define the value, or
- making a stochastic determination (as described above),

the program simulates water movement over time. It begins this process with the output from the weather simulation. With this information, the program can account for the water balance in the surface layer for each month, using the following methodology:

1. If post-closure care is no longer active at the site, the thickness of the cover layer is reduced each month by an amount indicating monthly erosion loss. Erosion loss is based on either user-specified values (when available), generalized data for each of the seven prototype designs or, lacking either of these, the state average value contained in the National Data Base.

2. The amount of raw infiltration (precipitation runoff) is calculated using a runoff coefficient from the National Data Base.

3. The potential evapotranspiration is calculated using either the Thornthwaite[19] or Blaney-Criddle method. The choice of method is dependent on the site's geographic location. If the soil cover has eroded, evapotranspiration is considered to be negligible because of the resulting lack of vegetation.

4. The amount of water in the cover layer is reduced if the potential evapotranspiration exceeds the raw infiltration. This calculation is made using a function of the form shown in Exhibit B-10.

If there is a net movement of water into the cover layer beyond the layer's field capacity, then water seeps into the layers below. Like the cover material, the underlying layers exhibit a certain capacity to hold water. In other words, once the field capacity of any layer is reached, it passes any excess water it receives to the layer below. This process is depicted in Exhibit B-11. This "water balance" approach is analogous to viewing each layer as a bucket with a finite capacity to hold water. The inflows and outflows of water are calculated at each time step. When the bucket is full, it overflows into the next bucket (the underlying layer).

This water balance approach assumes that the rate at which the layers can accept water is large enough so that within a time step (i.e., a month), a layer can accept all the water "offered" to it. Because this is not necessarily a valid assumption for either the clay layers or synthetic layers, the approach is modified for these layers. For clay liners, the submodule estimates the total amount of water the clay can accept in a one-month

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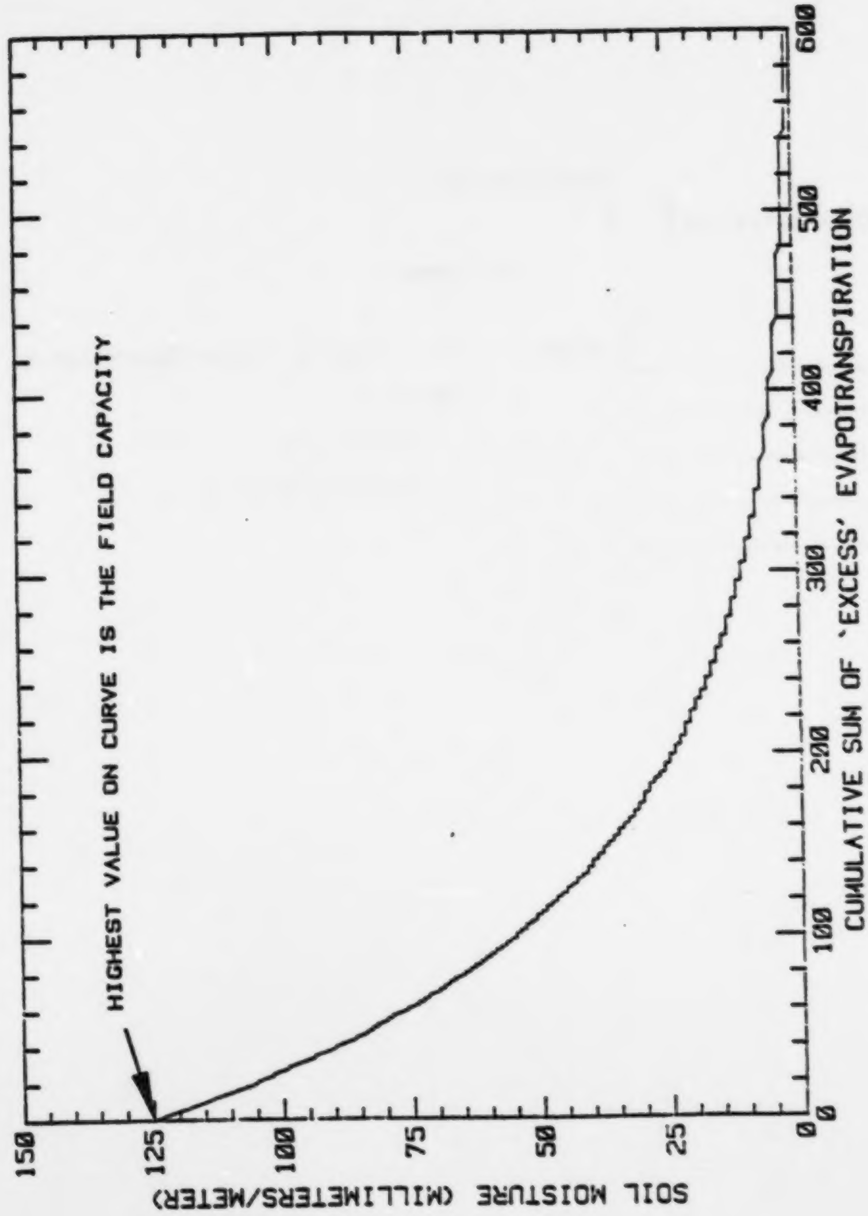
[19] Thornthwaite, C. W. and J. R. Mather, "Instructions and Tables for Computing Potential Evapotranspiration and the Water Balance," Publications in Climatology. Laboratory of Climatology, Drexel Institute of Technology, Vol. 10, No. 3, 1957, pp. 185-311.

EXHIBIT B-10

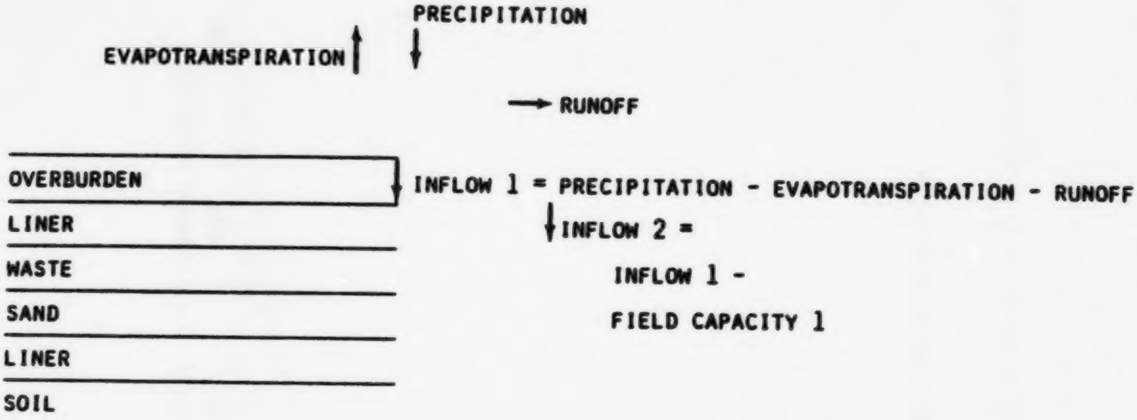
RELATION OF EXCESS EVAPOTRANSPIRATION TO INFILTRATION



Source: Thornthwaite and Mather, 1957.

EXHIBIT B-II

CONCEPTUAL MODEL OF WATER BALANCE CALCULATION


PRECIPITATION
EVAPOTRANSPIRATION
RUNOFF
OVERBURDEN
LINER
WASTE
SAND
LINER
SOIL
INFLOW 1 = PRECIPITATION - EVAPOTRANSPIRATION - RUNOFF
INFLOW 2 =
INFLOW 1 -
FIELD CAPACITY 1

period. First, an estimate is made for the hydraulic conductivity as a function of water content (Exhibit B-12). Field experience suggests that for clays employed as liners, the volumetric wetness remains at a minimum level (e.g., 0.3), with the result that conductivity will not drop below 10^{-9} m/s. The driving force downward (head gradient) is assumed to be the distance between the midpoint of the two layers. If the maximum amount of water the clay can accept in a month is less than the amount "offered," then the smaller amount is accepted into the clay layer and the rest is redistributed in the layers above the clay.[20]

If a synthetic layer is intact, it causes the same redistribution of water, except that no water is allowed to pass through the synthetic layer. If an active leachate collection system is present in a layer, all water in excess of field capacity that is not passed by the next lower layer is assumed to be removed by the collection system.

At the end of a simulated year's time, the submodel has an estimate of the volume of water, if any, which has passed through the site for every month of the simulated year. A running total of the total volume of leachate to date is also kept, as is a running total for the volume of water collected in the leachate collection system. If the total amount of water is less than the "critical value" (defined below), then the calculation goes on to the next year, with no calculation made for travel time to the monitoring well. In other words, until the layers between the waste layer and water table are saturated with contaminants, no significant movement of waste into the aquifer will occur. If this critical value has been exceeded, however, the waste enters the groundwater system, and dilution effects and travel time to both the monitoring well and the drinking water well are calculated.

The hydrologic transport model is composed of two discrete sub-models:

- **Landfill Leachate Source Model** in which the landfill site is assumed to be a two-dimensional leachate source to the unsaturated soil column beneath the site, and approximate dimensions of the site are obtained from the data on site type. The leachate discharge (concentration and flux) is assumed to be uniformly distributed over the site at any instant in time. However, the discharge varies with time according to the moisture infiltration of the site.

- **Saturated Zone Transport Model** in which the leachate plume from the unsaturated zone acts as a two-dimensional horizontal area source on the water table surface of the saturated zone. It is assumed that the water flux from the unsaturated zone is

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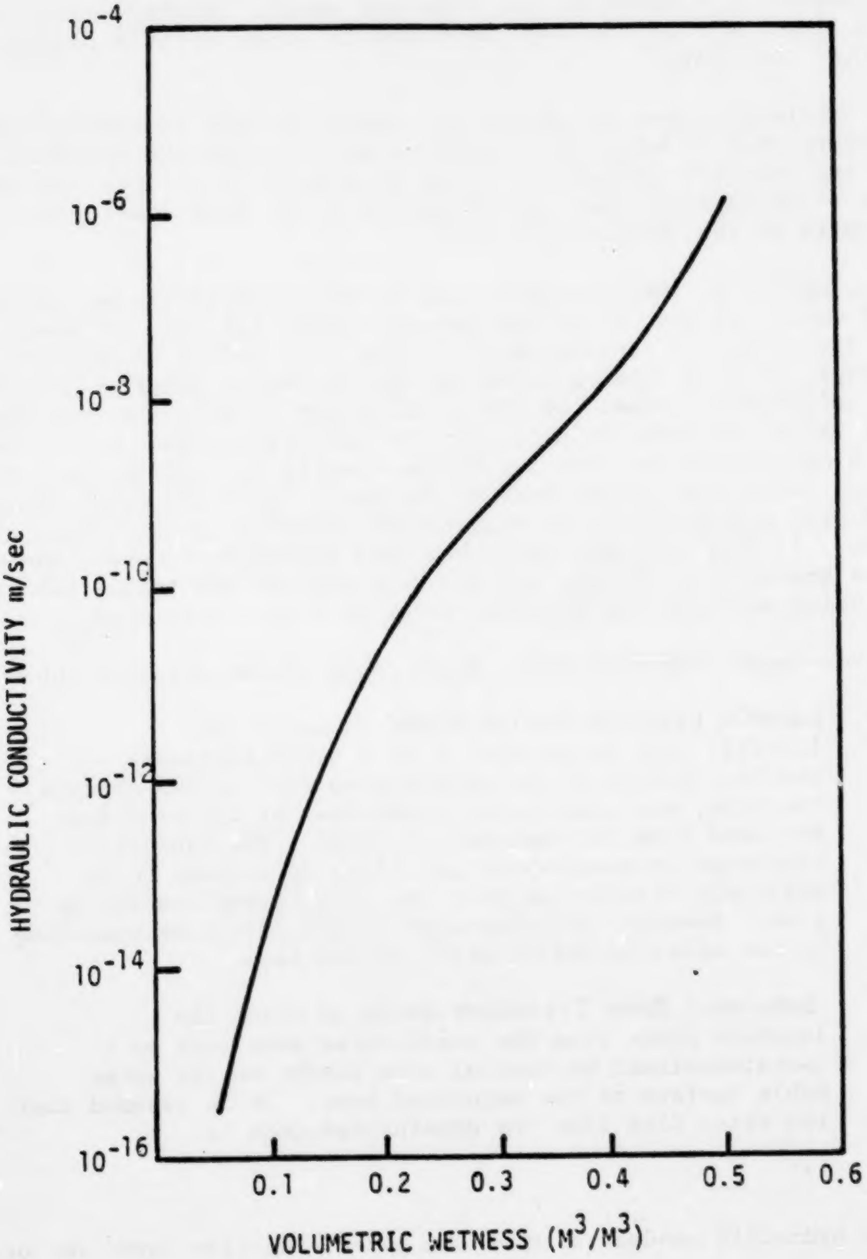
[20] The hydraulic conductivity of the underlying clay layer for prototype designs 1, 2, 6, and 7 is fixed at a value greater than 10^{-9} m/s. See Exhibit B-3 for details.

EXHIBIT B-12

MODIFIED SOIL HYDRAULIC CONDUCTIVITY RELATION EMPLOYED IN RELEASE SIMULATION MODEL



insignificant compared to the water flux in the saturated zone; thus, only contaminant particles are released to the saturated zone. The leachate plume moves through the saturated zone according to a constant value seepage velocity and dispersion coefficient influenced by geochemical retardation of flow and the dispersion model's attenuation in the system.

The transport equation is given by:

$$\frac{\partial C}{\partial t} + \frac{Vx}{R}\frac{\partial c}{\partial x} = \frac{Dx}{R}\frac{\partial^2 c}{\partial x}$$

where C - C(x,y,z,t) = leachate concentration at position (x,y,z) at time t

Vx = seepage velocity of water (x-direction)

Dx = dispersion coefficient of water (x-direction)

R = geochemical retardation coefficient of the leachate.

This relationship is expressed in a simple three-dimensional hydrologic transport model that monitors four fronts: (1) the detectable concentration of the first arrival toxic constituent; (2) the toxic concentration of the first arrival toxic constituent; (3) the taste and odor concentration of the first arrival constituent (not just toxic constituents); and (4) the indicator parameter (TDS for inorganics, TOC for organics) concentrations for the entire waste. Initial concentrations are assumed to be at the constituent's solubility level. Dilution and attenuation are accounted for during movement through the soil column and the aquifer. The initial point of detection is assumed to be the monitoring well, which is located at the downflow perimeter of the site. The model employs a Gaussian three-dimensional analytical solution which considers head drop, hydraulic conductivity, porosity, and dispersion coefficients.

Two failure modes are considered for synthetic covers and liners. These are: (1) failure resulting from improper installation and (2) failure resulting from "aging." Failure resulting from improper installation will be calculated using the user-supplied probability of improper installation. Based on this probability, failure will then occur at randomly selected sites, beginning at the opening date for liners and the closing date for covers. Default values are 0.25 for liners and 0.05 for covers. These values were based on limited data for actual landfill failures and should be revised over time to reflect improved data and new construction practices.

Failure resulting from aging is determined by Monte Carlo simulation using a probability distribution curve that varies over time. In other words, the probability of rupture increases with the age of the liner or cover. However, current sources -- including recent EPA publications describing the behavior and performance of synthetic liners -- do not contain sufficient data to predict liner life accurately.[21] An average lifetime of 25 years for synthetic liners and 50 years for synthetic covers is assumed by the model unless overridden by user-supplied values. These figures are based on expected values for pond liner life reported by Lee (1974)[22] and on the 20-25 year guarantee that many synthetic membrane manufacturers offer for their products. Liners are expected to age faster than covers because of their interactions with wastes. The failure prediction is achieved through a random draw from a bimodal distribution based on the mean average life for the membrane.

Certain conditions can cause more rapid aging of liners and covers. It has been observed that waste incompatibility will lead to a more rapid aging of liners. To account for this, waste constituents are classified as polar organics, non-polar organics, or inorganics. If more than one of these waste types is present at a site, it is assumed that the liner will age at twice the normal rate. Covers exposed to sunlight will age more rapidly than those protected by soil cover. If erosion has removed soil over a cover, it is assumed that the cover will then age at twice the normal rate.

A potential failure mode of clay covers is intrusion by plants and animals. Based on work being conducted by Battelle Pacific Northwest Laboratories and the results of Hakonson and Gladney,[23] it was concluded that the effect of plant root intrusion on permeability would probably be small, but that animal intrusion may have a significant effect if the cover is shallow enough to be in the burrowing zone of animals. Therefore, it is assumed that animal intrusion will occur when erosion reduces the total thickness of the cover and overburden to one meter or less. It is also assumed that intrusion will affect 10 percent of the site area. Using data presented by Moore and Ali[24] and assuming that the effects of animal intrusion are similar to cracking, the chance of cover failure will be increased by a factor of two following animal intrusion.

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[21] Haxo, H. E., "Durability of Liner Materials for Hazardous Waste Disposal Facilities," Proceedings of the Seventh Annual Research Symposium on Land Disposal: Hazardous Waste, EPA-600/9-81-0026, EPA, Cincinnati, Ohio, 1981, pp. 140-156; Haxo, H. E., "Effects of Liner Materials on Long-Term Exposure in Waste Environments," Proceedings of the Eighth Annual Research Symposium of Land Disposal: Hazardous Waste, EPA-600/9-82-002, EPA, Cincinnati, Ohio, 1982, pp. 191-211; and Matrecon, Inc., Lining of Waste Impoundment and Disposal Facilities, SW-870, EPA, Washington, D.C., 1980.

[22] Lee, J., "Selecting Membrane Pond Liners," Pollution Engineering, 6, 1, 1974, pp. 33-40.

[23] Hakonson, T. E. and E. S. Gladney, Biological Intrusion of Low-Level Waste Trench Covers, LA-UR-81-2972, Los Alamos National Laboratory, New Mexico, 1981.

[24] Moore, C. A. and E. M. Ali, "Permeability of Cracked Clay Liners," Proceedings of the Eighth Annual Symposium on Land Disposal of Hazardous Wastes, 1982.

Research being performed at Texas A&M University has shown that organic leachates may have a significant effect on the permeability of clay liners. Based on results presented by Anderson, Brown, and Green,[25] the model increases the permeability of clay liners by two orders of magnitude if organic wastes are present in leachate.

B.2 OUTPUTS

The output from each release simulation is the timing and type of releases for a given site. Replicate runs are made to generate a matrix of when each of seven release types[26] are estimated to occur in each of the replicated release simulations. In addition, the simulated distance to the off-site point of detection is reported in this matrix. Exhibit B-13 displays a release matrix for 20 repetitions of the release simulation.

The release matrix can be developed at any level of aggregation. For example, each site could be analyzed individually, thereby creating a separate matrix for each site. Similarly, a group of sites could be run together, resulting in a single (although potentially larger) matrix for the entire group. The performance of each site in the group would be described by the same breach and timing tables.

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[25] Anderson, D., K. W. Brown, and J. Green, "Effects of Organic Fluids on the Permeability of Clay Soil Liners," Proceedings of the Eighth Annual Symposium on Land Disposal of Hazardous Wastes, 1982.

[26] The seven release types (discussed more fully in Volume I of this report) are as follows:

Release Type 1 - Indicator parameters arrive at monitoring well

Release Type 2 - Detection level for specific contaminants arrives at monitoring well

Release Type 3 - Toxic level for specific contaminants arrives at monitoring well

Release Type 4 - Taste and odor threshold arrives at potable well/surface water

Release Type 5 - Detection level for specific contaminants arrives at potable well/surface water

Release Type 6 - Toxic level for specific contaminants arrives at potable well/surface water

Release Type 7 - Infiltration backs up and overflows

EXHIBIT B-13

SAMPLE RELEASE MATRIX[1]

Iteration Number	Time to Each Release Type (Years Since Facility Opening) 1	2	3	4	5	6	7	Distance to Off-Site Point of Detection (feet)
1	999[2]	25	30	999	50	60	999	2,000
2	50	45	999	999	999	999	999	1,000
3	10	8	8	15	13	13	999	800
4	20	40	15	50	60	70	999	4,000
5	999	999	999	999	999	999	999	600
6	999	110	999	999	999	999	999	8,000
7	40	70	999	999	80	999	999	10,000
8	90	50	90	100	60	60	999	5,000
9	30	999	999	999	999	999	999	9,000
10	999	40	38	50	50	46	999	2,000
.								
.								
.								

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[1] Values are for illustrative purposes only.

[2] 999 means release was not observed in first 125 years.

The advantage of analyzing groups of sites is that it greatly reduces the required number of computations. For example, if 1000 repetitions are desired to specify a release matrix, then individually analyzing 2000 sites would require 1000 x 2000 = 2 million repetitions. However, the 2000 sites could be divided into 10 groups of reasonably similar sites, with 200 sites in each group. The analysis of each group still requires 1000 repetitions, or 1000/200 = 5 repetitions per site. Thus, the total number of repetitions required is reduced from 2 million to 10,000.

Analyzing sites by groups is only appropriate for sites that are similar. For example, separate release matrices would be desirable for sites that differ by design and groundwater region. Analyzing the various sets of tables would result in estimates of the expected influences on site performance of the various factors used to distinguish groups. For the runs made in this effort, 24 release matrices were created. (A total of 24 matrices were created by analyzing each of six site designs within each of four geographic regions covering the 48 states.)

B.3 DISCUSSION

B.3.1 Low-Probability Acute Events

It should be noted that the model does not account for acute disruptive events such as earthquakes and extreme storms. A review of damage cases showed that these events are probably very minor causes of discharges from hazardous waste facilities.[27] In light of the large number of breaches predicted for "normal" conditions, the omission of acute events has not had a significant effect on the results.

B.3.2 Land Treatment Facilities

No special provisions have been made for the entry of land treatment facilities in the model. It is assumed that when closed, these facilities will be treated as landfills if hazardous residuals remain. If residuals do not remain, no significant breach scenarios are evident. Hence, the landfill model will suffice as long as the user provides information on the site design, the moisture content at closing, and the nature of the waste.

B.3.3 Injection Wells

The Release Simulation Model is not designed to handle injection wells. If injection wells are to be considered for qualification to enter the PCLTF, an approach must be selected to predict the post-closure breach scenarios. Two possibilities are of major interest: (1) the well is constructed improperly and allows leakage into a potable aquifer during operation, which results in the contamination of a drinking well, and (2) the receiving aquifer is improperly characterized, allowing contaminants to reach a point of water use after closure.

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[27] Fred C. Hart Associates, Assessment of Hazardous Waste Mismanagement Damage Case Histories, Draft, prepared for EPA under Contract 68-01-6474, 1981.

In the first case, the probability of improper construction would be a user-supplied variable. Aquifer data employed in the landfill model would then be utilized to predict the time of travel for toxic levels to a point of use. However, deep wells usually reside in aquifers well below the surface aquifer for which data exist in the model. Very little is known about these deep aquifers.

In the second case, two relations must be derived. The first deals with the likelihood that the aquifer is improperly characterized. This is likely to vary directly with depth, i.e., the deeper the receiving aquifer, the more likely that it is not well understood. The second relation required would estimate the likelihood that a point of potable use is ultimately contaminated. This probability will vary inversely with depth, i.e., the deeper the receiving aquifer, the less likely that a potable source will be affected. The selection of reasonable algorithms to describe these relations would be controversial.

B.3.4 Corrective Actions

No special provisions have been made for analyzing the performance of corrective actions. The model output currently describes the first occurrence of the seven release types analyzed. If a corrective action is undertaken, the descriptions of the remaining releases are no longer valid.

Although the Release Simulation Model has not been used to analyze the performance of corrective actions, it could be modified to do so. For example, it could be assumed that once corrective actions are specified, the site can reenter the analysis. As currently envisioned, corrective action could consist of two elements: cap/liner repair and withdrawal and containment of contaminated groundwater. When cap/liner repair is undertaken, the site could be reentered into the simulation as a new site with a design that reflects the repair work.

Withdrawal wells would require slightly different treatment. The model is too simple to evaluate the performance of well fields designed to withdraw contaminated water for treatment. However, the effects of withdrawal would be similar to the activation of a leachate control system, i.e., termination of all uncontrolled contaminated flows through the liner during the period of pumping. The user could specify how long pumping will be performed, with the default value possibly being set as a period equivalent to the time it took for the breach to be discovered in the first place. This is somewhat analogous to the RCRA regulations that set the compliance period equal to the period of operation of a given site. However, the validity of this assumption is clearly uncertain. There is potentially a hysteresis effect in such systems; desorption may well take much longer than the original adsorption onto soils, depending on pumping rates and the contaminants involved. A second area of concern is the residual contamination in the unsaturated zone, which would effectively accelerate movement of subsequent breaches compared to how the model would otherwise simulate the post-remedial action period. This effect, while probably small, would constitute an inaccuracy.

APPENDIX C

MODEL IMPLEMENTATION

This appendix describes how the PCLTF Simulation Model and the Release Simulation Model were implemented. The run characteristics, subroutines, data files, and random number generators are described separately for each model. Additionally, the statistical properties of the results of the PCLTF Simulation Model are discussed.

C.1 PCLTF SIMULATION MODEL

C.1.1 Run Characteristics

The PCLTF Simulation Model was run on an IBM 4341. Model execution required approximately 7 megabytes of virtual storage. Disk storage requirements were approximately 320 kilobytes for the input files, 1,200 kilobytes for the databases, and 3,900 kilobytes for the model routines. Depending on the number of iterations and the number of years, the model output is approximately 3 megabytes. A Base Case model run with 29 iterations and a facility scaling factor of 1 for 100 years required approximately 16,000 CPU seconds to complete execution.

C.1.2 Pseudo-Random Number Generator

The PCLTF Simulation Model, like all stochastic models, relies on a routine to generate random numbers for simulating probabilistic events. Exhibit C-1 displays the routine, called a pseudo-random number generator (or random number generator), utilized in the PCLTF Simulation Model.

The random number generator shown in Exhibit C-1 employs the multiplicative congruential technique. The multiplier (equal to 65,541) and the modulus[1] (equal to 2,147,483,647), determine the statistical properties of the number generated.

Random number generators of the type used here operate in cycles. The starting seed for the routine is an input parameter which allows the model user to control where the random number generator cycle begins. The cycle has a finite period associated with the chosen multiplier and modulus. The period for the values used here cannot exceed 1/4 of the modulus, or 536,870,912 random draws. After this number of draws, the values will begin to repeat in the same order. Although the random number generator simulates a random selection of values, the actual process is predictable (consequently, the term "pseudo-random" is often used).

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[1] This modulus, $2^{31}-1$, represents the largest number held by four bytes, which is the FORTRAN default size for integer type variables.

EXHIBIT C-I

THE PCLTF SIMULATION MODEL RANDOM NUMBER GENERATOR

```
   SUBROUTINE RANDU (ISEED, RANDOM)

      IRAND = ISEED * 65541
      IF (IRAND) 5, 15, 15
    5 IRAND = IRAND + 2147483647 + 1
   15 RANDOM = IRAND
      RANDOM = RANDOM * .4656613E-9
      ISEED = IRAND
      RETURN
      END
```

The PCLTF Simulation Model employs the predictability of the routine to its own advantage. Given a particular starting seed, the random number generator will always produce an identical set of random numbers. This property allows us to reduce total variance across model runs by choosing identical starting seeds. Within runs the routine simulates random selection, but across runs the model minimizes the variance due to randomness.

In order to qualify as a statistically valid random number generator, a routine must satisfy at least two criteria. First, the routine should generate the desired distribution across the selected interval; in this case a uniform distribution between zero and one. Second, the routine should display little or no correlation between successive random draws. Any statistically discernible pattern between draws belies randomness.

Exhibits C-2 and C-3 contain the results of tests used to measure how well the random number generator produces results that are uniformly distributed between zero and one. The starting seed for the test was equal to 31,553 (the starting seed used in PCLTF Simulation Model runs). The test routine first draws ten random values using the random number generator, then it draws another 10,000 random values and counts how many of these values fall within a given range of the ten initial random values. The ranges shown in Exhibit C-2 are ± 0.01 and ± 0.001. For example, out of the 10,000 random numbers drawn, 197 were between 0.18634 and 0.20634 (the first row in Exhibit C-2). Given a uniform distribution, we would expect to observe 200 (0.02 x 10,000) values within 0.01 of the initial values.

The chi-square statistic was used to measure how closely the observed values fit the results expected from a uniform distribution.[2] The chi-square values for the two sets of results in Exhibit C-2 are 3.66 and 3.35. With 9 degrees of freedom, the chi-square statistic at 99 percent confidence is 21.7, and with 90 percent confidence is 14.7. Therefore, the null hypothesis that the observed values were drawn from a uniform distribution cannot be rejected.[3]

Exhibit C-3 displays the observed distribution for 50,150 random values generated by the test routine. Here, we would expect approximately 2,508 (0.05 x 50,150) observations to fall within each of the 20 possible ranges of values. The chi-square value for the distribution in Exhibit C-3 is 19.84. Again, we cannot reject the null hypothesis that the observed values were drawn from a uniform distribution because the chi-square statistics with 19 degrees of freedom are larger than the observed chi-square values (chi-square

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[2] For a description of the chi-square statistics, see Wonnacott and Wonnacott, Introductory Statistics for Business and Economics, (John Wiley & Sons: New York, 1977).

[3] In fact, the small chi-square values indicate that the observed distribution deviates from a uniform distribution by an amount which is consistent with the influences of random factors alone.

EXHIBIT C-2

DISTRIBUTION OF RESULTS FOR THE RANDOM NUMBER GENERATOR WITH RANGE = 0.01 AND 0.001[1]

Initial Random Value	Number Observed plus or minus 0.01 of the Initial Random Value
0.19634	197
0.36418	192
0.73328	208
0.22834	201
0.95133	198
0.80463	190
0.26317	207
0.51596	196
0.58032	192
0.90421	219

Initial Random Value	Number Observed plus or minus 0.001 of the Initial Random Value
0.83518	19
0.62162	19
0.33663	24
0.82586	25
0.84297	18
0.78309	19
0.75681	21
0.99074	23
0.98717	17
0.10324	20

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[1] Based on two sets of 10,000 random draws. The first set used the starting seed 31,553, and the second set followed the first set in sequence.

EXHIBIT C-3

OBSERVED DISTRIBUTION OF VALUES FROM THE RANDOM NUMBER GENERATOR ALONG THE INTERVAL FROM 0 TO 1[1]

Range	# Observations
0.0 to 0.05	2,479
0.05 to 0.10	2,566
0.10 to 0.15	2,513
0.15 to 0.20	2,410
0.20 to 0.25	2,517
0.25 to 0.30	2,441
0.30 to 0.35	2,529
0.35 to 0.40	2,537
0.40 to 0.45	2,478
0.45 to 0.50	2,428
0.50 to 0.55	2,549
0.55 to 0.60	2,507
0.60 to 0.65	2,450
0.65 to 0.70	2,426
0.70 to 0.75	2,545
0.75 to 0.80	2,616
0.80 to 0.85	2,533
0.85 to 0.90	2,499
0.90 to 0.95	2,556
0.95 to 1.00	2,471

---

[1] Based on 50,150 random draws with a starting seed of 31,553.

statistics with 19 degrees of freedom are 36.2 at 99 percent confidence and 27.2 at 90 percent confidence).

The Mean Square Successive Difference Test (MSSD) is used to examine correlation between successive random draws.[4] Based on 100 randomly drawn values, a MSSD test statistic of 2.027 was observed. This value is compared to the expected value of 2.0 (which would indicate no correlation between successive random draws) using a Z statistic. The observed Z statistic of 0.27 is sufficiently small so that the null hypothesis of independence between draws cannot be rejected.

The possibility of higher order correlation among draws from this random number generator cannot be ruled out. The extent to which higher order correlation in the random numbers would influence the model results is not known. In general, however, based on the inability to reject the null hypothesis discussed above, the method used here appears to be acceptable in terms of both uniformity across the desired interval and independence across successive observations.

C.1.3 Statistical Properties of the Results

The statistical properties of the results influence the manner in which the Model is used. Specifically, the choice of the following run parameters is affected:

- Number of iterations: the number of repetitions used to create the distributions of results;
- Facility scaling factor: the portion of the total facility population used as a basis for estimating Fund performance; and
- The starting seed used to initiate the random number sequence generated by the random number generator.

Each is discussed below.

The number of iterations determines the sample size upon which model results are computed. The more iterations, the closer a run's results approximate the underlying population. More iterations, however, increase execution time and costs. Consequently, one wishes to identify the fewest number of iterations necessary to produce statistically useful results.

Exhibit C-4 displays a graph of how different numbers of iterations affect four test statistics: the 10th and 90th percentiles, the median, and the mean of the total Fund balance in year 75. Total Fund balance is a useful output variable to use here because it is a primary indicator of Fund performance. Year 75 was adopted for two reasons: (1) variance between iterations becomes

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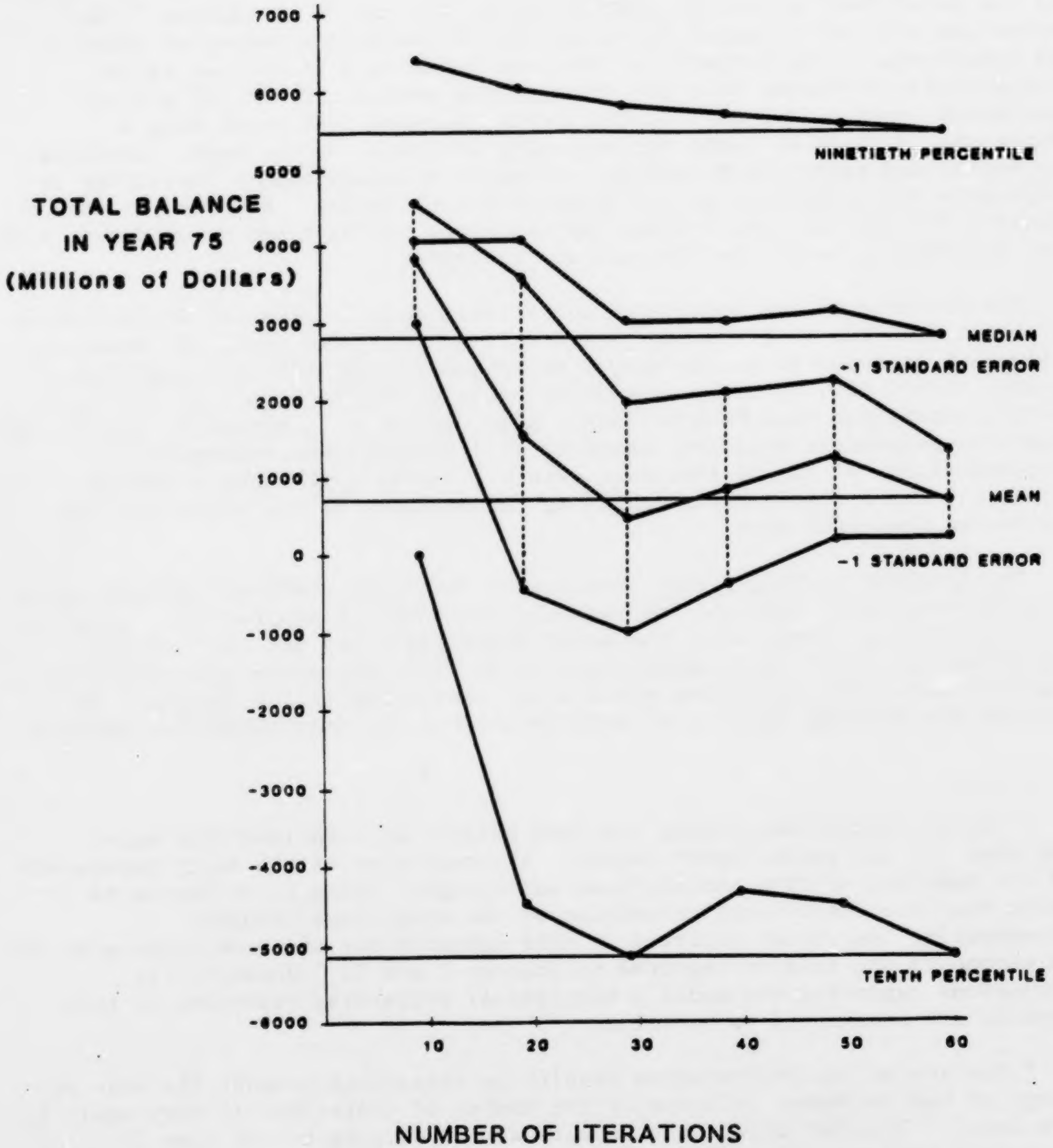
[4] Wannacott and Wannacott, op. cit., pp. 488-490.

EXHIBIT C-4

GRAPH OF ESTIMATES OF FOUR TEST STATISTICS AS A FUNCTION OF THE NUMBER OF ITERATIONS PERFORMED



more significant over time (and consequently would be more sensitive to the choice of the number of iterations); and (2) year 75 represents a critical time period for the Fund (when the mean and median balances begin to drop rapidly in Simulation 1).

To assess the influence which the choice of the number of iterations performed has on the Model results, we first test to see if there is a statistical difference between a given estimate of the mean and the actual population mean. Exhibit C-5 displays the mean and standard error of the mean for the total Fund balance in year 75 for 9, 29, and 59 iterations.[5] We assume the mean and standard deviation for 59 iterations represent those of the population.[6] The estimate of the mean based on 9 iterations is not statistically different from the 59-iteration estimate at the 99 percent confidence level (t = 1.36). These results suggest that performing 9 iterations is valid at least for obtaining estimates of the mean. Likewise, the median and ninetieth percentile estimates obtained from 9 iterations are reasonably representative of the 59-iteration estimates. However, as seen in Exhibits C-4 and C-5, the 9-iteration estimates of the tenth pecentile is much less representative of the 59-iteration estimate.

The estimate of the mean based on 29 iterations is also not statistically different from the 59-iteration estimate (t = .14). (In fact, the observed difference is expected as the result of random factors with a probability greater than 0.90.) Clearly, the performance of 29 iterations is sufficient for estimating the mean Fund balance. Also, the tenth percentile, median, and ninetieth percentile estimates based on 29 iterations are reasonable representations of the 59-iteration values. Overall, it appears that 29 iterations are sufficient for examining the adequacy of the PCLTF with the statistics presented here.

The facility scaling factor involves an analogous trade-off between costs of performing Model runs and the representativeness of the results. Given a facility scaling factor of n, the model processes every nth facility and multiplies the total costs which arise by n. This procedure cuts execution time and costs, but sacrifices statistical confidence in the results. To evaluate the scaling factors, we examine whether the mean total Fund balance

---

[5] The statistics describing the Fund balance were derived from model runs done for the second draft report. Although some of the input parameters and the modeling of firm bankruptcies has changed, there is no reason to expect that the statistical properties of the model have changed. Consequently, the values reported in this appendix for the Fund balance do not correspond to the results reported in Volumes I and II. However, the conclusions regarding the model's statistical properties described in this appendix are considered to be valid.

[6] The use of the 59-iteration results is reasonable because the rate of change of the estimates in terms of the number of iterations is very small at this level. In other words, the results are converging by the time 59 iterations have been performed.

EXHIBIT C-5

VALUES OF TEST STATISTICS FOR EVALUATING THE NUMBER OF ITERATIONS (Estimates are for the Total Fund Balance in Year 75 in Millions of Dollars)

Test Statistic	Number of Iterations 9	29	59
Mean	3,559	343	573
Standard Error of Mean	765	1,473	837
Tenth Percentile Minus 1[1]	--[3]	-14,773	-8,770
Tenth Percentile	-33	-5,122	-5,122
Tenth Percentile Plus 1[2]	387	-4,867	-4,867
Median Minus 1[1]	2,846	2,697	2,691
Median	3,787	2,846	2,846
Median Plus 1[2]	5,091	3,391	2,973
Ninetieth Percentile Minus 1[1]	5,697	5,512	5,465
Ninetieth Percentile	6,179	5,544	5,383
Ninetieth Percentile Plus 1[2]	--[3]	5,697	5,328

---

[1] "Minus 1" refers to the value for the iteration ranked 1 below the specified quantile.

[2] "Plus 1" refers to the value for the iteration ranked 1 above the specified quantile.

[3] Cannot be estimated with 9 iterations.

for year 75 estimated with scaling factors greater than one is statistically different from the population mean.

The mean total Fund balance in year 75 for a run of 29 iterations with a scaling factor of 3 is 1,740, and the standard error of the mean is 1,055 (both in millions of dollars). This estimate of the mean is not statistically different from the population mean at the 99 percent confidence level (t = .46). This performance is somewhat better than the result obtained with 9 iterations and a scale factor of 1 (t = 1.36, see above) which has approximately the same run cost. Likewise, the scale factor of 3 estimates of the tenth percentile (-6,895 million), and ninetieth percentile (5,750 million), are more representative than the 9-iteration estimates. The median estimate (4,151 million) is not better. Performing 29 iterations with a scale factor of 3 may be preferred to performing 9 iterations with a scale factor of 1.

The procedure for evaluating the influence of the starting seed on the results is the same as described above. We postulate a null hypothesis that there is no difference in the mean total Fund balance in year 75 for runs with different starting seeds. The mean total balance in year 75 for a run with 29 iterations and starting seed 31,553 is 991 (in millions of dollars). The corresponding result for a run with 29 iterations and starting seed 55,599 is 343. If the null hypothesis is true, then the expected difference between these independent estimates is 0. The observed t statistic is 0.37, and therefore we cannot reject the null hypothesis. We conclude that the starting seed has no statistically discernable effect on the estimate of the mean. The estimates of the tenth percentile (-5122 vs. -8770), median (2846 vs. 1964) and ninetieth percentile (5544 vs. 5191) are also very similar. Consequently, the model results are independent of the choice of starting seed, as is desired.

C.1.4 Subroutines

The following routines read and write information from and to disk and initialize certain variables:

- **$RLMAT**: sets up the release matrices for use during each iteration.
- **END$IT**: writes the results of each iteration to binary files and updates the sums and the sums of squares.
- **END$RN**: outputs information at the end of a run.
- **IN$ITR**: initializes variables for a current iteration.
- **IN$IYR**: initializes variables for the current year.
- **IN$RUN**: initialize scenario parameters for a run.

- **IN$STA**: organizes and completes the state data input. If a regime for a given state is known, it will be provided in the input file and the model uses that specification. Otherwise, the model generates the missing regime based on the appropriate input probabilities.

- **RD$CTY**: reads county data (population, housing and farm values)

- **RD$EXC**: reads user-supplied inputs.

- **RD$FAC**: reads in the facility data and stores the data in arrays organized by economic market region.

- **RD$SCN**: reads the scenario data file and stores the values in appropriate common areas.

- **RD$FRM**: reads firm data.

- **TABLE 1 through TABLE 13**: write out statistics for creating summary tables of model results.

- **WR$EXC, WR$SCN and WR$FRM**: write the user-supplied input to a file for verification following the run.

The following routines simulate the size of the facility population:

- **$KEEP**: selects existing facility for the current iteration.

- **$WSTES**: calculates the total waste and taxable waste in the next calendar year based on the price of disposal, the price of disposal substitutes, and the cross elasticities between disposal and substitute prices.

- **ADD$FC**: determines if any new facilities are needed and adds enough new facilities to meet the demand for the current model year.

- **GET$FC**: describes which facilities to use from the existing facility file, and then initializes these facilities for the current iteration.

The following routines perform the facility-level characterization:

- **IN$FAC**: assigns the following facility characteristics: open year, state pointer, closing year, permit status, process types, size and design by process type, status flags, and exposed population.

- **$PRCHR**: assigns a size and design type to each facility process based on the appropriate distributions.

- **IN$PHY**: initializes the potential releases at a facility. The routine obtains information from the Battelle release matrices.
- **$PERMT**: determines the permit status of an existing facility.
- **N$FIN**: initializes financial characteristics (i.e., net worth, total assets, financial assurance mechanism) of a facility.
- **$CLOSE**: identifies the release, detection, monitoring, and response states of a facility at closure.
- **CH$SUB**: determines if the capital and O&M costs for actions are successfully allocated.
- **$SUB**: identifies the substitute actions for a given action or actions which cannot be undertaken due to lack of funding.
- **$FLGCH**: controls the analyses of the changes occurring at facilities over time.
- **$ACTVE**: identifies any ongoing activities at a facility.
- **$QLPER**: determines a facility's PCLTF qualification status at the end of the qualification period.
- **DETECT*I**: determines if a release as detectable this year.
- **KN$ACT**: determines type of action to be implemented given the detection of a release.
- **RS$END**: determines if the response action ending affects future releases.
- **PHY$PV**: checks if ongoing response action prevents releases.
- **$PNTST**: determines the expected future state of groundwater contamination at a facility based on knowledge obtained from monitoring actions.
- **$PRVKN**: determines whether detection of a previous release is needed to detect a new release.
- **$DOM**: determines whether actions are dominated by another action.
- **$RESET**: determines any new activities that should be ongoing given an array of activities that have ended.

- **$RSTRT**: reinitializes the releases at a facility once all response actions have been completed at the facility and the facility is in a "cleaned-up" state.
- **$ADJST**: adjusts the facility closing year and the variables dependent on the closing year when bankruptcy is forced.
- **MN$CST**: determines monitoring (capital and O&M) costs.
- **CR$CST**: determines care costs by estimating the costs of each post-closure care activity.
- **RS$CST**: determines capital and O&M response costs. The three possible response actions are: surface sealing, fluid removal and treatment on-site, and fluid removal and treatment off-site.
- **$CHCLM**: determines what type of third-party claims are brought given that a release is detected.
- **CM$CST**: estimates claims (personal injury real property, economic loss, and natural resources).
- **RP$CST**: estimates real property losses due to off-site releases.
- **$PERIN**: estimates personal injury claims.

The following routines perform cost allocation and balance the Fund:

- **$ARULE**: determines an allocation rule based on the current qualification status of the facility and the number of years after the facility closed.
- **$BLNCE**: balances for the Fund in each year.
- **$DIVDE**: divides claims, monitoring, care or response costs among five agencies (financial assurance, owner/operator, state, federal, and gap).
- **$ELIM**: deallocates current costs as a facility is being eliminated. The routine gets called at closure if the facility is allowed to decontaminate.
- **$POLCH**: makes policy changes in response to the current Fund balance or trends in Fund balance.
- **$REALO**: reallocates current costs when PCLTF qualification status changes, financial assurance runs out, owner/operator is no longer solvent, or post-closure period ends.
- **$ROLL**: rolls over costs generated in a given year.

- **CH$BNK**: evaluates viability of all firms at the beginning of each model year.

- **F$BANK**: evaluate effects of firm's bankruptcy on a facility's operational status and ability to cover costs.

A variety of general purpose statistical and model control routines are also used. (These routines are not listed.)

C.1.5 Data Bases

The following data files are used in the PCLTF Simulation Model:

- **COUNTY**: contains the county data on property values, housing density, and population.

- **FACILITY DATABASE**: contains the facility data file. For each facility, this file includes: the EPA facility identification number, the county code, the facility zip code, the latitude and longitude, the groundwater region, economic region, disposal process codes, drinking water survey data, and the facility open year.

- **PC$LEG**: contains the data describing the legal regimes.

- **PC$FIRM**: contains the data on firms.

- **PC$SCEN**: contains the scenario data file. This file includes user-specified inputs for cost estimates and facility characteristics.

- **Run File**: contains the model control inputs such as: the number of iterations, the number of years, the facility scaling factor, and the starting seed. In addition, this file includes user-specified inputs for economic/financial data, PCLTF/RCRA policies, sensitivity factors, and other run parameters that define the policy simulation and sensitivity analysis runs.

- **RUNMAT01-RUNMAT24**: are the release matrices. There are 24 release matrices; one matrix for each of 4 regions and 6 design types.

C.2 RELEASE MODEL

C.2.1 Run Characteristics

The Release Model was run independently from the rest of the PCLTF model on a Vax 11/780 (by Battelle Pacific Northwest Laboratories). It required 25,088 bytes of memory for the input files, 15,360,000 bytes for the data bases, and 154,624 bytes for the predictive routines. The performance of 19,717 iterations to test four site types in four representative regions required 106,242 CPU seconds.

C.2.2 Pseudo-Random Number Generator

The random number generator used in the Release Model was based on a first order linear congruential pseudo-random number generator described in Pollard, J.M., Handbook of Numerical and Statistical Techniques, Cambridge University Press, New York, 1977, pp. 236-239. The basic formula is $Wn = K_1(W_{n-1})$ MOD P. The constants $K_1 = 470001$ and $P = 999563$ were based on recommendations of J.G. Skellan in "Studies in Statistical Ecology," Biometrika, 39, 346-362. In essence, the next random number is set as the remainder (MOD) after dividing $K_1(W_{n-1})$ by P. Hence, the process requires a "seed" number for W_{n-1} to initiate the process. When the same seed is employed, the random number sequence can be duplicated.

A test run was made to evaluate the distribution of the numbers generated by the algorithm. A series of 10,000 numbers was generated and analyzed through determination of a standard chi-square (X^2) value. The chi-square statistic was found to be 7.84, indicating a level of 99 percent confidence that the series was indeed uniformly distributed between zero and one.

C.2.3 Subroutines

The Release Model consists of a series of subroutines divided between two major routines as described below.

Baseline Analysis. This major routine sets up the data file for each facility, and consists of the following subroutines:

- **RRAN1**: generates random numbers for the Monte Carlo simulations.
- **WASTE**: performs the comparisons to determine which constituents will be identified as "first arrivers" for a given waste.
- **SORTWA**: sorts the wastes in ascending order.
- **FILLUP**: loads the information on the layers for the selected prototypical site design.
- **LSITE**: lists soil property data on a given facility and sends it to the printer.
- **FINDCL**: selects the location of the nearest primary weather station and retrieves the desired climate data.

Water Balance Routine. This major routine constitutes the predictive element of the model and creates subsequent release matrices. The following subroutines are used:

- **BREACH**: inventories breaches for a site.
- **FORM**: develops dispersion data required by the contaminant transport model.
- **DIFUSE**: calculates the concentration level for contaminants at points of interest.
- **BACKUP**: redistributes water levels back through the upper layers.
- **LSITE**: writes out the data for each layer in a site.
- **DECAY**: determines the decay constant versus the accumulated potential water loss as required by CURENT.
- **CURENT**: updates the water inventory for the layer based on the accumulated potential water loss.
- **START**: sets an initial value for accumulated potential water loss for a layer when the field capacity has not been reached.
- **RAINFL**: makes a draw for the precipitation pattern for a site.
- **TEMPR**: makes a draw for the temperature pattern for a site.
- **TBETA**: regenerates the density distribution pattern for the climate feature of interest using the output from GAMMA.
- **GAMMA**: generates the gamma function for input to TBETA.
- **ANORML**: creates a normal distribution for a set of data.
- **UNIFRM**: makes a draw from a uniform distribution.
- **PET1**: performs a Thornthwaite calculation to determine evapotranspiration.
- **PET2**: performs the Blaney-Criddle calculation to determine evapotranspiration.
- **FSLOPE**: finds the slope required for the PET1 calculation.
- **FINDHC**: determines the gradient across a clay layer.
- **ERF**: calculates the error function for the transport model FORM.

C.2.4 Data Bases

The following data bases are used in the Release Model:

- **WASTE.ID**: correlates EPA waste code to chemical constituents in the waste.
- **WASTE.PT**: pointer locates data for a given waste.
- **CODE.FILE**: contains all pertinent properties for chemical constituents.
- **LONGLATN.DAT**: is the geographic data file holding the various geohydrologic and soil information for a site.
- **CARD.IMG**: contains failure probability and timing information such as opening and closing dates.
- **PARTM.DAT**: contains the weather data for the primary weather stations partitioned by region.
- **LOCATION.DAT**: contains site location data partitioned into regions.
- **WASTELIST.DAT**: contains data on the number of wastes and their codes for each site.
- **SITE.DAT**: is the output file of accumulated data for each site in the Release Model.

APPENDIX D

USER OPTIONS

This appendix presents the options which the user has in running the PCLTF Simulation Model. The values presented here were used in Simulation 1.

```
==========================** RUN EXPLANATION **========================

   RUN NAME:            >BASE CASE
   DATE:                >MM/DD/YY
   RUN DESCRIPTION:     >BASE CASE (SCALE FACTOR =1 ;NUMBER OF ITERATIONS  =29)
                        >
   OPERATOR:

==========================** MODEL CONTROL **==========================

   NUMBER OF ITERATIONS(1-50):                       29<

   STARTING SEED(MUST BE ODD):                    31553<

   NUMBER OF YEARS(1-100):                          100<

   FACILITY SCALING FACTOR(>=1):                      1<

   READ BINARY SCENARIO DATA(T/F):                    F<

   WRITE SCENARIO DATA BINARY(T/F):                   F<

   READ BINARY FACILITY DATA(T/F):                    T<

   WRITE FACILITY DATA BINARY(T/F):                   F<

   READ BINARY COUNTY DATA(T/F):                      T<

   WRITE COUNTY DATA BINARY(T/F):                     F<

   READ BINARY INITIALIZED FACILITY DATA(T/F):        F<

   WRITE INITIALIZED FACILITY DATA BINARY(T/F):       F<

   STOP BEFORE YEAR 1(T/F):                           F<
```

```
========================** ECONOMIC/FINANCIAL DATA **================

  ENTER VALUES FOR EACH YEAR:
                                          1983 1985 1986 1990 1995 2033 2083
                                          ---- ---- ---- ---- ---- ---- ----
  ANNUAL INFLATION RATE(%)==>              3.1  5.3  5.2  4.6  4.0  4.0  4.0

  ANNUAL INTEREST RATE(%)==>               8.0 10.0  9.2  5.7  5.1  5.1  5.1

                                          1983 1985 1986 1993 2032 2033 2083
                                          ---- ---- ---- ---- ---- ---- ----
  AVERAGE $/TON WASTE DISPOSAL(1983$)==>  100. 100. 100. 100. 100. 100. 100.
  AVERAGE $/TON SUBSTITUTION
                    FOR DISPOSAL(1983$)==> 100. 100. 100. 100. 100. 100. 100.

  ANNUAL RATE OF GROWTH IN OUTPUT(%)==>   -2.0 -2.0 -2.0 -2.0 -2.0  0.0  0.0
  ANNUAL RATE OF GROWTH OF AVERAGE
        FACILITY DISPOSAL CAPACITY(%)==>   1.0  1.0  1.0  1.0  1.0  1.0  1.0
                                          ---- ---- ---- ---- ---- ---- ----

  FIRST FISCAL YEAR OF MODEL RUN==>         1984<
  STARTING TOTAL PCLTF BALANCE
      (MILLIONS OF FIRST YEAR $)==>          0.0<
  STARTING UNOBLIGATED PCLTF BALANCE
      (MILLIONS OF FIRST YEAR $)==>          0.0<

  TAX RATE($/DRY WEIGHT TON)==>             2.13<
  FUND CEILING
      (MILLIONS OF FIRST YEAR $)==>         200.<
  FIRST YEAR WASTE DISPOSAL
               (MILLIONS OF TONS)==>         64.<
  FRACTION OF WASTE DISPOSAL WHICH
                   IS TAXABLE(%)==>         28.4<

  DEFINITION OF OBLIGATED FUNDS(1-3)==>        3<
    1 = NO OBLIGATED FUNDS
    2 = ONGOING MONITORING, MMC, AND
            RESPONSE COSTS FOR A
            SPECIFIED NUMBER OF YEARS
    3 = AVERAGE OF FUNDS EXPENDED IN
            PREVIOUS 10 YEARS
  SPECIFIED NUMBER OF YEARS FOR
     OBLIGATED FUNDS POLICY = 2 ==>            0<

  MINIMUM ADMINISTRATIVE COSTS
     CHARGED TO THE FUND EACH
     YEAR (1000S OF 1983$)==>                0.0<

  FRACTION OF FUND EXPENDITURES
     USED TO CALCULATE ADMINISTRATIVE
     COSTS (0-1.00)==>                       0.1<

  INDEX TAX RATE TO INFLATION(T/F) ==>         F<
  INDEX FUND CEILING TO INFLATION(T/F)==>      F<

  PRICE ELASTICITY OF DEMAND FOR
     WASTE DISPOSAL(-1.5 TO -0.5)==>         0.0<
  CROSS PRICE ELASTICITY OF DEMAND
     FOR WASTE DISPOSAL(0.5 TO 1.5)==>       0.0<
```

```
============** FINANCIAL DATA FOR BANKRUPTCY ANALYSIS **=============

 CUTOFF FOR NET WORTH CATEGORIES          10.0<
    (MILLIONS OF $)

                                          NET WORTH     NET WORTH
                                          $10 MILLION   MORE THAN
                                          OR LESS       $10 MILLION
                                          -------       -------
 BACKGROUND BANKRUPTCY FAILURE RATE   ==>  0.0042<       0.0026<
 AVERAGE RETURN ON ASSESTS            ==>  0.0600<       0.0600<
 DISCOUNT RATE FOR BANKRUPTCY ANALYSIS==>  0.0000<       0.0000<
 INVESTMENT TAX CREDIT                ==>  0.1000<       0.1000<
 NUMBER OF YEARS FOR:
 REVENUE AND EXPENDITURE PROJECTIONS  ==>       10<           10<
 DEPRECIATION OF CAPITAL EXPENDITURES ==>        1<            1<
                                                ---           ---


 FRACTION OF COSTS THAT MAY BE PASSED THROUGH TO CONSUMER PRICES EACH YEAR

                NET WORTH                       NET WORTH
 YEAR       $10 MILLION OR LESS          MORE THAN $10 MILLION
          CAPITAL   O & M   CLAIMS     CAPITAL   O & M   CLAIMS
           -----    -----   -----       -----    -----   -----
  1         0.0      0.0     0.0         0.0      0.0     0.0
  2         0.0      0.0     0.0         0.0      0.0     0.0
  3         0.0      0.0     0.0         0.0      0.0     0.0
  4         0.0      0.0     0.0         0.0      0.0     0.0
  5         0.0      0.0     0.0         0.0      0.0     0.0
  6         0.0      0.0     0.0         0.0      0.0     0.0
  7         0.0      0.0     0.0         0.0      0.0     0.0
  8         0.0      0.0     0.0         0.0      0.0     0.0
  9         0.0      0.0     0.0         0.0      0.0     0.0
 10         0.0      0.0     0.0         0.0      0.0     0.0
           -----    -----   -----       -----    -----   -----
```

```
===========================** PCLTF/RCRA POLICIES **====================

   POST-CLOSURE PERIOD (YRS.)                   30<
   FINANCIAL ASSURANCE PERIOD (YRS.)            30<
   PCLTF QUALIFICATION PERIOD (YRS.)             5<

   POST-CLOSURE PERIOD RULES: THE POST-CLOSURE
       PERIOD MAY BE EXTENDED UNTIL THE COMPLETION
       OF AN ONGOING MONITORING OR RESPONSE ACTION.
       IDENTIFY ACTIONS WHICH EXTEND THE POST-CLOSURE
       PERIOD BY ENTERING A "T" OR "F".

       ACTION TYPE:
       -----------
            1.   IP MONITORING ON-SITE            F<
            2.   CONST. MONITORING ON-SITE        T<
            3.   PLUME DELINEATION ON-SITE        T<
            4.   CONST. MONITORING OFF-SITE       F<
            5.   PLUME DELINEATION OFF-SITE       F<
            6.   SURFACE SEALING                  T<
            7.   FLUID REMOVAL ON-SITE            T<
            8.   FLUID REMOVAL OFF-SITE           F<
                                                  -

   PCLTF QUALIFICATION RULES:  ENTER 0, 1, 2, OR 3 FOR EACH RELEASE TYPE
   --------------------------
         0 = NO INFLUENCE ON QUALIFICATION
         1 = DELAY IN QUALIFICATION IF RESPONSE TO RELEASE NOT COMPLETED
                BEFORE END OF QUALIFICATION PERIOD
         2 = DISQUALIFICATION IF RESPONSE TO RELEASE NOT COMPLETED BEFORE
                END OF QUALIFICATION PERIOD
         3 = AUTOMATIC DISQUALIFICATION IF RELEASE OCCURS BEFORE END
               OF QUALIFICATION PERIOD

                    RELEASE TYPE:
                    ------------
                      1. IP ON                    3<
                      2. DET. CONST. ON           3<
                      3. TOX. CONST. ON           3<
                      4. T/O OFF                  3<
                      5. DET. CONST. OFF          3<
                      6. TOX. CONST. OFF          3<
                      7. BATHTUB                  3<

      IF DEFAULTING ON FINANCIAL ASSURANCE PRIOR TO THE END OF THE
      QUALIFICATION PERIOD RESULTS IN DISQUALIFICATION,
      ENTER 3, OTHERWISE ENTER 0==>               3<
```

```
FINANCIAL ASSURANCE COVERAGE:   IDENTIFY FOR EACH ACTION OR CLAIM
-----------------------------   WHETHER FINANCIAL ASSURANCE IS
                                REQUIRED BY THE O/O (ENTER T OR F)

     ACTION TYPE:
     ------------
       1. IP MONITORING ON              T<
       2. CONST. MONITORING ON          T<
       3. PLUME DELINEATION ON          F<
       4. CONST. MONITORING OFF         F<
       5. PLUME DELINEATION OFF         F<
       6. SURFACE SEALING               F<
       7. FLUID REMOVAL ON              F<
       8. FLUID REMOVAL OFF             F<
       9. POST-CLOSURE CARE             T<

     CLAIM TYPE:
     -----------
       1. PERSONAL INJURY               F<
       2. REAL PROPERTY                 F<
       3. ECONOMIC LOSS                 F<
       4. NATURAL RESOURCE DAMAGE       F<

FINANCIAL ASSURANCE TRUST FUNDS:  TRUST FUNDS MAY LAST VARYING
--------------------------------  AMOUNTS OF TIME.  ENTER BELOW THE
                                  DISTRIBUTION OF DURATIONS:

                PROBABILITY         DURATION IN YRS
                -----------         ---------------
       1.         0.011<                 21.<
       2.         0.007<                 22.<
       3.         0.012<                 23.<
       4.         0.020<                 24.<
       5.         0.032<                 25.<
       6.         0.053<                 26.<
       7.         0.088<                 27.<
       8.         0.145<                 28.<
       9.         0.238<                 29.<
      10.         0.394<                 30.<
                  -----                -----
```

```
COST ALLOCATION:  COST ALLOCATION POLICIES ARE DEFINED IN TWO STAGES
----------------    1. DEFINE THE OPTIONS FOR THE ORDER OF ALLOCATION
                    2. DEFINE ALLOCATION RULES WHICH IDENTIFY THOSE
                       ALLOCATION OPTIONS TO BE USED FOR EACH COST

  ORDER OF ALLOCATION OPTIONS:  DEFINE THE ORDER OF ALLOCATION.
  ----------------------------

  NUMBER OF OPTIONS ( 1 - 9 )  ====>         9<

          O/O FINANCIAL
OPTION #   ASSURANCE    O/O      STATE     PCLTF  SUPERFUND    GAP
               -         -         -         -        -         -
   1           0         1         0         0        0         2
   2           0         1         0         0        2         3
   3           0         0         1         0        0         2
   4           1         2         3         0        0         4
   5           0         1         2         0        0         3
   6           0         0         0         0        1         2
   7           0         0         0         1        0         0
   8           0         1         0         2        0         0
   9           1         2         0         0        0         3
               -         -         -         -        -         -
```

```
ALLOCATION RULES:  INSERT THE ALLOCATION OPTION (1-5) TO BE USED
-----------------  FOR EACH COST TYPE

NUMBER OF RULES USED (1 - 29)==>          28<
                                          --

      MONITORING ACTION TYPE:
      -----------------------
         1. IP MONITORING ON
         2. CONST. MONITORING ON
         3. PLUME DELINEATION ON
         4. CONST. MONITORING OFF
         5. PLUME DELINEATION OFF

      RESPONSE ACTION TYPE:
      ---------------------
         1. SURFACE SEALING
         2. FLUID REMOVAL ON
         3. FLUID REMOVAL OFF

      POST-CLOSURE CARE
      -----------------

      CLAIM TYPE:
      -----------
         1. PERSONAL INJURY
         2. REAL PROPERTY
         3. ECONOMIC LOSS
         4. NATURAL RESOURCE DAMAGE

      FACILITY STATUS:
      ----------------
         E$N = EXISTING (1) OR NEW (2)
         P$N = PERMITTED (1), DENIED PERMIT (2) OR NOT YET DETERMINED (3)
         QS  = QUALIFICATION STATUS (1-4)
               1 NOT YET DETERMINED
               2 QUALIFIED
               3 UNQUALIFIED
               4 DELAYED

      NAME DEFINITIONS:
      -----------------
         OPER = DURING OPERATION
         Q P  = QUALIFICATION STATUS PENDING
         Q    = QUALIFIED
         U Q  = UNQUALIFIED
         QDEL = QUALIFICATION DETERMINATION DELAYED
```

```
    ALLOCATION RULE MATRIX ==>
    ----------------------

--------------------------------------------------------------------------------  |
        | TIME   |                                                                 |
        | AFTER  |E$N|P$N|QS | MONITORING ACT| RESP.     |CARE|    CLAIMS          |
 NAME*  |CLOSURE |1-2|1-2|1-4| 1  2  3  4  5 | 1  2  3   |    | 1  2  3  4        |
--------|--------|---|---|---|---------------|-----------|----|-----------        |
**  EXISTING FACILITIES -- PERMIT TO BE DETERMINED                                 |
--------|--------|---|---|---|---------------|-----------|----|-----------        |
  OPER  |-99- -1 | 1 | 3 | 1 | 1  1  1  1  1 | 1  1  1   |  1 | 9  9  9  2        |
--------|--------|---|---|---|---------------|-----------|----|-----------        |
**  EXISTING FACILITIES -- PERMIT DENIED                                           |
--------|--------|---|---|---|---------------|-----------|----|-----------        |
  OPER  |-99- -1 | 1 | 2 | 1 | 1  1  1  1  1 | 1  1  1   |  1 | 9  9  9  2        |
  Q P   |  0- 29 | 1 | 2 | 1 | 4  4  2  2  2 | 2  2  2   |  4 | 5  5  5  2        |
  Q P   | 30-999 | 1 | 2 | 1 | 3  3  6  6  6 | 6  6  6   |  3 | 5  5  5  2        |
  Q     |  0- 29 | 1 | 2 | 2 | 4  4  2  2  2 | 2  2  2   |  4 | 7  7  7  7        |
  Q     | 30-999 | 1 | 2 | 2 | 7  7  7  7  7 | 7  7  7   |  7 | 7  7  7  7        |
  UQ    |  0- 29 | 1 | 2 | 3 | 4  4  2  2  2 | 2  2  2   |  4 | 5  5  5  2        |
  UQ    | 30-999 | 1 | 2 | 3 | 3  3  6  6  6 | 6  6  6   |  3 | 5  5  5  2        |
  QDEL  |  0- 29 | 1 | 2 | 4 | 4  4  2  2  2 | 2  2  2   |  4 | 5  5  5  2        |
  QDEL  | 30-999 | 1 | 2 | 4 | 3  3  6  6  6 | 6  6  6   |  3 | 5  5  5  2        |
--------|--------|---|---|---|---------------|-----------|----|-----------        |
**  EXISTING FACILITIES -- PERMIT GRANTED                                          |
--------|--------|---|---|---|---------------|-----------|----|-----------        |
  OPER  |-99- -1 | 1 | 1 | 1 | 1  1  1  1  1 | 1  1  1   |  1 | 9  9  9  2        |
  Q P   |  0- 29 | 1 | 1 | 1 | 4  4  2  2  2 | 2  2  2   |  4 | 5  5  5  2        |
  Q P   | 30-999 | 1 | 1 | 1 | 3  3  6  6  6 | 6  6  6   |  3 | 5  5  5  2        |
  Q     |  0- 29 | 1 | 1 | 2 | 4  4  2  2  2 | 2  2  2   |  4 | 7  7  7  7        |
  Q     | 30-999 | 1 | 1 | 2 | 7  7  7  7  7 | 7  7  7   |  7 | 7  7  7  7        |
  UQ    |  0- 29 | 1 | 1 | 3 | 4  4  2  2  2 | 2  2  2   |  4 | 5  5  5  2        |
  UQ    | 30-999 | 1 | 1 | 3 | 3  3  6  6  6 | 6  6  6   |  3 | 5  5  5  2        |
  QDEL  |  0- 29 | 1 | 1 | 4 | 4  4  2  2  2 | 2  2  2   |  4 | 5  5  5  2        |
  QDEL  | 30-999 | 1 | 1 | 4 | 3  3  6  6  6 | 6  6  6   |  3 | 5  5  5  2        |
--------|--------|---|---|---|---------------|-----------|----|-----------        |
**  NEW FACILITIES -- PERMIT GRANTED                                               |
--------|--------|---|---|---|---------------|-----------|----|-----------        |
  OPER  |-99- -1 | 2 | 1 | 1 | 1  1  1  1  1 | 1  1  1   |  1 | 9  9  9  2        |
  Q P   |  0- 29 | 2 | 1 | 1 | 4  4  2  2  2 | 2  2  2   |  4 | 5  5  5  2        |
  Q P   | 30-999 | 2 | 1 | 1 | 3  3  6  6  6 | 6  6  6   |  3 | 5  5  5  2        |
  Q     |  0- 29 | 2 | 1 | 2 | 4  4  2  2  2 | 2  2  2   |  4 | 7  7  7  7        |
  Q     | 30-999 | 2 | 1 | 2 | 7  7  7  7  7 | 7  7  7   |  7 | 7  7  7  7        |
  UQ    |  0- 29 | 2 | 1 | 3 | 4  4  2  2  2 | 2  2  2   |  4 | 5  5  5  2        |
  UQ    | 30-999 | 2 | 1 | 3 | 3  3  6  6  6 | 6  6  6   |  3 | 5  5  5  2        |
  QDEL  |  0- 29 | 2 | 1 | 4 | 4  4  2  2  2 | 2  2  2   |  4 | 5  5  5  2        |
  QDEL  | 30-999 | 2 | 1 | 4 | 3  3  6  6  6 | 6  6  6   |  3 | 5  5  5  2        |
--------|--------|---|---|---|---------------|-----------|----|-----------        |
COLUMNS:--- ---| - | - | - | -  -  -  -  - | -  -  -   |  - | -  -  -  -        |
--------------------------------------------------------------------------------  |
```

STATE SHARE OF SUPERFUND EXPENDITURES
BY TYPE OF FACILITY OWNER

	PRIVATE	MUNICIPAL	STATE	FEDERAL	OTHER
MONITORING					
INDICATING PARAMETERS	0.10	0.50	0.50	0.00	0.00
CONSTITUENTS ON-SITE	0.10	0.50	0.50	0.00	0.00
PLUME DEL/TRK ON-SITE	0.10	0.50	0.50	0.00	0.00
CONSTITUENTS OFF-SITE	0.10	0.50	0.50	0.00	0.00
PLUME DEL/TRK OFF-SITE	0.10	0.50	0.50	0.00	0.00
RESPONSE					
SURFACE SEALING	0.10	0.50	0.50	0.00	0.00
FLUID REM/TRT ON-SITE	0.10	0.50	0.50	0.00	0.00
FLUID REM/TRT OFF-SITE	0.10	0.50	0.50	0.00	0.00
POST-CLOSURE CARE	0.10	0.50	0.50	0.00	0.00
CLAIMS					
PERSONAL INJURY	0.00	0.00	0.00	0.00	0.00
REAL PROPERTY	0.00	0.00	0.00	0.00	0.00
ECONOMIC LOSS	0.00	0.00	0.00	0.00	0.00
NATURAL RESOURCE	0.00	0.00	0.00	0.00	0.00

```
KNOWLEDGE TO ACTION MATRIX:
---------------------------

THIS MATRIX DEFINES THOSE ACTIONS AND CLAIMS WHICH ARE UNDERTAKEN
IN RESPONSE TO THE DETECTION OF RELEASES. THE MATRIX HAS THREE
TYPES OF ENTRIES:

  1. RELEASE CODE:  EACH OF THE SEVEN RELEASE TYPES CAN BE DETECTED:
     -------------
                 RELEASE TYPE:
                 -------------
                    1. IP ON
                    2. DET. CONST. ON
                    3. TOX. CONST. ON
                    4. T/O OFF
                    5. DET. CONST. OFF
                    6. TOX. CONST. OFF
                    7. BATHTUB

  2. SPECIAL CONDITION CODE:  THE ACTIONS TAKEN IN RESPONSE TO
     -----------------------  DETECTED RELEASES MAY DEPEND ON
                              KNOWING THAT SPECIAL CONDITIONS
                              EXIST.  THERE ARE 6 SPECIAL CONDITIONS
                              IN THE MODEL:

   CODE                       CONDITION
   ----                       ---------
     1        RELEASE HAS NOT YET GONE OFF SITE, BUT IT WILL.
    -1        RELEASE WILL NOT GO OFF SITE.
     2        RELEASE HAS NOT YET BECOME TOXIC OFF SITE, BUT IT WILL.
    -2        RELEASE WILL NOT BECOME TOXIC OFF SITE.
     3        RELEASE IS ALREADY OFF SITE.
     4        RELEASE IS ALREADY TOXIC OFF SITE.

     IF NO SPECIAL CONDITIONS ARE DESIRED, THEN A CONDITION CODE
     OF 0 (ZERO) IS USED.

  3. ACTION CODE:  FOR EACH RELEASE CODE/CONDITION CODE COMBINATION,
     -----------   ACTION CODES DEFINE WHICH ACTIONS/CLAIMS ARE
                   AFFECTED.  THE THREE ACTION CODES ARE:

 ACTION CODE                  CONDITION
 -----------                  ---------
      0            NO EFFECT
      1            INITIATE ACTION (IF ACTION IS ALREADY ONGOING,
                        START DATE IS UPDATED)
     -1            STOP ACTION (IF ACTION IS NOT ONGOING, THERE IS
                        NO EFFECT)
  THERE ARE EIGHT ACTIONS WHICH CAN HAVE ACTION CODES OF -1, 0, 1:

        MONITORING ACTION TYPE:              RESPONSE ACTION TYPE:
        -----------------------              ---------------------
           1. IP MONITORING ON                  1. SURFACE SEALING
           2. CONST. MONITORING ON              2. FLUID REMOVAL ON
           3. PLUME DELINEATION ON              3. FLUID REMOVAL OFF
           4. CONST. MONITORING OFF
           5. PLUME DELINEATION OFF

  POST-CLOSURE CARE CAN BE GIVEN AN ACTION CODE OF -1 OR 0.

  EXPOSURE CAN BE GIVEN AN ACTION CODE OF -1 OR 0.

  EACH OF THE FOUR CLAIM TYPES CAN BE GIVEN ACTION CODES OF 0 OR 1:
        CLAIM TYPE:
        -----------
           1. PERSONAL INJURY
           2. REAL PROPERTY
           3. ECONOMIC LOSS
           4. NATURAL RESOURCE DAMAGE

  UP TO 24 DIFFERENT KNOWLEDGE TO ACTION RULES CAN BE SPECIFIED.

INPUT THE NUMBER OF RULES USED ==>          16<
                                            --
INPUT EACH OF THE RULES BELOW ==>

------------------------------------------------------------------------|
                    | MONITORING ACT| RESP.   |CARE| EXP |   CLAIMS     |
  NAME  | REL | COND |  1  2  3  4  5 | 1  2  3 |    |     | 1  2  3  4|
--------|-----|------|---------------|---------|----|-----|------------|
 IP ON  |  1  |   0  |-1  1  0  0  0 | 0  0  0 |  0 |  0  | 0  0  0  0|
--------|-----|------|---------------|---------|----|-----|------------|
 DET ON |  2  |   0  |-1 -1  0  1  0 | 1  1  0 |  0 |  0  | 0  0  0  0|
 DET ON |  2  |   1  |-1 -1  0  1  0 | 1  1  0 |  0 |  0  | 0  0  0  0|
 DET ON |  2  |  -1  |-1 -1  0  1  0 | 1  1  0 |  0 |  0  | 0  0  0  0|
 DET ON |  2  |   3  |-1 -1  0  1  0 | 1  1  0 |  0 |  0  | 0  0  0  0|
--------|-----|------|---------------|---------|----|-----|------------|
 TOX ON |  3  |   0  |-1 -1  0  1  0 | 0  0  0 |  0 |  0  | 0  0  0  0|
 TOX ON |  3  |   1  |-1 -1  0  1  0 | 0  0  0 |  0 |  0  | 0  0  0  0|
 TOX ON |  3  |  -1  |-1 -1  0  1  0 | 0  0  0 |  0 |  0  | 0  0  0  0|
 TOX ON |  3  |   3  |-1 -1  0  1  0 | 0  0  0 |  0 |  0  | 0  0  0  0|
--------|-----|------|---------------|---------|----|-----|------------|
 T/O OFF|  4  |   0  | 0  0  0  1  0 | 0  0  0 |  0 |  0  | 0  0  0  0|
--------|-----|------|---------------|---------|----|-----|------------|
 DET OFF|  5  |   0  | 0  0  0 -1  0 | 1  1  1 |  0 |  0  | 0  1  1  0|
 DET OFF|  5  |   2  | 0  0  0 -1  0 | 1  1  1 |  0 |  0  | 0  1  1  0|
 DET OFF|  5  |  -2  | 0  0  0 -1  0 | 1  1  1 |  0 |  0  | 0  1  1  0|
 DET OFF|  5  |   4  | 0  0  0 -1  0 | 1  1  1 |  0 |  0  | 0  1  1  0|
--------|-----|------|---------------|---------|----|-----|------------|
 TOX OFF|  6  |   0  | 0  0  0  0  0 | 0  0  0 |  0 | -1  | 1  1  1  1|
--------|-----|------|---------------|---------|----|-----|------------|
 BATHTUB|  7  |   0  | 0  0  0  0  0 | 1  0  0 |  0 |  0  | 0  0  0  0|
--------|-----|------|---------------|---------|----|-----|------------|
 COLUMNS:  -  |   -  | -  -  -  -  - | -  -  - |  - |  -  | -  -  -  -|
------------------------------------------------------------------------|
SITE ASSESSMENT INFORMATION:  IN ORDER FOR AN EXISTING FACILITY TO
----------------------------  CLOSE OR RECEIVE A FINAL PERMIT IT
                              MAY BE REQUIRED TO PERFORM A SITE
                              ASSESSMENT.  THE SITE ASSESSMENT IS
                              DEFINED IN TERMS OF THE EVIDENCE IT
                              SUPPLIES.  IDENTIFY THE EVIDENCE
                              REQUIRED IN TERMS OF THE SEVEN RELEASE
                              TYPES. (ENTER "T" OR "F")

                 RELEASE TYPE:          AT CLOSURE     FOR PERMIT
                 -------------          ----------     ----------
                   1. IP ON                 F<             F<
                   2. DET. CONST. ON        F<             F<
                   3. TOX. CONST. ON        F<             F<
                   4. T/O OFF               F<             F<
                   5. DET. CONST. OFF       F<             F<
                   6. TOX. CONST. OFF       F<             F<
                   7. BATHTUB               F<             F<

PERMITTING POLICY:  PERMITS WILL BE DENIED TO EXISTING FACILITIES
------------------  BASED ON THE INFORMATION PROVIDED IN THE SITE
                    ASSESSMENT AND THE PERMITTING POLICY.  UP TO 10
                    PERMITTING RULES MAY BE DEFINED BELOW IN TERMS
                    OF THE SEVEN RELEASE TYPES (ENTER "T" OR "F")

NUMBER OF PERMITTING RULES (1 - 10):          1<
------------------------------------

PERMITTING RULES:
-----------------

                                    RELEASE TYPES
                        IP   DET  TOX  T/O  DET  TOX  B-TUB
   RULE                 ON   ON   ON   OFF  OFF  OFF
   ----                 -    -    -    -    -    -    -
    1                   F    F    F    F    F    F    F
                        -    -    -    -    -    -    -

NOTE: ALL NEW FACILITIES WILL OPEN WITH PERMITS
```

```
=========================** RUN PARAMETERS **=========================


ACTION DURATIONS:  FOR EACH ACTION IDENTIFY THE NUMBER OF YEARS FOR:
-----------------  A. COMPLETION OF CAPITAL INVESTMENT;
                   B. COMPLETION OF ACTION.

        ACTION TYPE:                        A           B*
        ------------                      ----        ----
           1. IP MONITORING ON              1<        999<
           2. CONST. MONITORING ON          1<         30<
           3. PLUME DELINEATION ON          1<         30<
           4. CONST. MONITORING OFF         1<         30<
           5. PLUME DELINEATION OFF         1<         30<
           6. SURFACE SEALING               1<          1<
           7. FLUID REMOVAL ON              5<         30<
           8. FLUID REMOVAL OFF             5<         50<
           9. POST-CLOSURE CARE             1<        999<
                                          ----        ----

  * 999 = ACTION ONGOING IN PERPETUITY


MINIMUM DURATION OF REPONSE ACTIONS IF UNDERTAKEN FOR SECOND TIME:
------------------------------------------------------------------

           1. SURFACE SEALING               1<
           2. FLUID REMOVAL ON-SITE         5<
           3. FLUID REMOVAL OFF-SITE       10<
                                          ----


EFFECT OF RESPONSE ACTIONS ON RELEASES: IDENTIFY FOR EACH RESPONSE
--------------------------------------- ACTION WHETHER IT INFLUENCES
                                        EACH RELEASE TYPE
0 = NO INFLUENCE;  1 = INFLUENCE

                                      RELEASE TYPES
                         IP   DET  TOX  T/O  DET  TOX  B-TUB
  RESPONSE ACTIONS:      ON    ON   ON  OFF  OFF  OFF
  -----------------      -     -    -    -    -    -    -
   SURFACE SEALING       0     0    0    0    0    0    1
   FLUID REMOVAL ON      1     1    1    1    1    1    0
   FLUID REMOVAL OFF     0     0    0    1    1    1    0
                         -     -    -    -    -    -    -

   STRENGTH OF INFLUENCE OF
     RESPONSE ACTIONS ON RELEASES==>         3<
        1 = STRONG                           --
        5 = WEAK
```

```
PROBABILITY OF DETECTION:  PROBABILITY THAT ON-SITE MONITORING
-------------------------  WELLS WILL DETECT RELEASES WITH ROUTINE
                           MONITORING AND ANALYSIS WHEN THEY OCCUR:

 PROBABILITY OF DETECTION==>              0.75<
                                         -----

PERMITS:  PERMITS WILL BE REQUESTED OF EXISTING FACILITIES AT THE
--------  FOLLOWING RATE

1. WITHIN THE NEXT X YEARS, THE PERMIT STATUS WILL BE DETERMINED
   AT A GIVEN FRACTION OF FACILITIES

   ENTER X ==>                               2<
                                            --
2. BETWEEN YEAR X AND YEAR Y THE REMAINDER OF EXISTING FACILITIES
   WILL HAVE THEIR PERMIT RESOLVED

   ENTER Y ==>                               5<
                                            --
3. THE FRACTION RESOLVED BY YEAR X IS:     .10<
                                         -----
4. FRACTION OF EXISTING FACILITIES WHO
   PASS TEST TO RECEIVE A PERMIT AND
   WANT TO OBTAIN A PERMIT

   ENTER FRACTION ==>                      .75<
                                         -----

PROPERTIES OF NEW FACILITIES:  NEW FACILITIES DRAWN FROM FACILITY
-----------------------------  POPULATION WITHIN THE TOP PERCENT
                               OF FACILITIES WITH THE FOLLOWING
                               CHARACTERISTICS:

                                        PERCENTAGE
1. MINIMUM NUMBER OF PEOPLE             ----------
   DRINKING WATER WITHIN
   FACILITY'S ZIP CODE            ==>    0.33<
2. MINIMUM COUNTY PROPERTY VALUE  ==>    1.00<
3. MAXIMUM TIME TO RELEASE TYPE 2 ==>    0.33<
                                -       ------

NOTE: THE RELEASE TYPE IS AN INPUT
```

```
========================** SENSITIVITY FACTORS **====================

 COSTS:
 ------

         MONITORING ACTION TYPE:
         -----------------------
            1. IP MONITORING ON           1.0<
            2. CONST. MONITORING ON       1.0<
            3. PLUME DELINEATION ON       1.0<
            4. CONST. MONITORING OFF      1.0<
            5. PLUME DELINEATION OFF      1.0<

         RESPONSE ACTION TYPE:
         ---------------------
            1. SURFACE SEALING            1.0<
            2. FLUID REMOVAL ON           1.0<
            3. FLUID REMOVAL OFF          1.0<

         POST-CLOSURE CARE                1.0<
         -----------------

         CLAIM TYPE:
         -----------
            1. PERSONAL INJURY
                 MEDICAL COSTS           1.00<
                 LOST WAGES              1.00<
                 MEDICAL MONITORING      0.75<
                 MORTALITY               1.00<
            2. REAL PROPERTY             1.00<
            3. ECONOMIC LOSS             1.00<
            4. NATURAL RESOURCE DAMAGE   1.00<
                                        ------

 FACILITY POPULATION: (ONLY ONE MAY BE SET TO LESS THAN 1.0)
 --------------------

   DECREASE PROBABILITY OF
      BEING CHOSEN (0.0 TO 1.0)==>        1.0<

   DECREASE PROBABILITY OF NOT
      BEING CHOSEN (0.0 TO 1.0)==>        1.0<

 RELEASES:
 ---------

   TIMING OF RELEASES ==>                 1.0<

 YEARS FOR COUNTING UP RELEASES FOR TABLE 11:
 --------------------------------------------

 YEARS SINCE OPENING 1 (>=1):              50<
 YEARS SINCE OPENING 2 (>=1):              75<

========================** END OF DATA **===========================
                         MODEL PARAMETER DATA

             THIS FILE CONTAINS THE STANDARD MODEL PARAMETER INPUTS

                  (NOTE:  ALL INPUT MUST BE RIGHT-JUSTIFIED.)

-----------------------------------------------------------------------------------
-----------   COST ALLOCATION DATA   ----------------------------------------------
-----------------------------------------------------------------------------------

-----------------------
LEGAL LIABILITY REGIMES:
-----------------------
                                                            LEGAL REGIME
                                              1     2     3     4     5     6     7

 PROBABILITY OF LEGAL REGIMES BEING   LEGALS(7)  0.040 0.040 0.300 0.350 0.050 0.150 0.070
   ADOPTED BY STATES                             ----- ----- ----- ----- ----- ----- -----


                                                   LOWER              UPPER
                                                   BOUND              BOUND
                                                  --------           --------
  CHANCE OF RECOVERY FOR        LEGPER(12,2)   1     0.0                0.0
  LEGAL REGIME CATEGORIES                      2     0.0               10.0
                                               3    10.0               20.0
                                               4    20.0               30.0
                                               5    30.0               40.0
                                               6    40.0               50.0
                                               7    50.0               60.0
                                               8    60.0               70.0
                                               9    70.0               80.0
                                              10    80.0               90.0
                                              11    90.0              100.0
                                              12   100.0              100.0
                                                  --------           --------
```

```
----------------------
STATE COVERAGE REGIMES:
----------------------

                                                                CLAIM COVERAGE REGIME
                                                      1     2     3     4     5     6     7     8

 PROBABILITY OF CLAIM COVERAGE REGIMES      STCOVS(8)   0.705 0.235 0.040 0.000 0.000 0.020 0.000 0.000
  BEING ADOPTED BY STATES                               ----- ----- ----- ----- ----- ----- ----- -----


                                                                STATE COVERAGE REGIME
                                                      1     2     3     4     5     6     7     8

 STATE PORTION OF COVERAGE UNDER EACH      STAPOR(8,6)
  STATE COVERAGE REGIME FOR EACH CLAIM       PI   :  1  0.000 0.000 0.000 1.000 0.000 1.000 0.000 0.000
  TYPE                                       PROP :  2  0.000 0.000 1.000 1.000 1.000 1.000 0.000 0.000
                                             ECON :  3  0.000 0.000 1.000 1.000 1.000 1.000 0.000 0.000
                                             ENVI :  4  0.000 0.000 1.000 1.000 1.000 1.000 0.000 0.000
                                             RESP :  5  0.000 1.000 1.000 1.000 0.000 0.000 0.000 0.000
                                             O&M  :  6  0.000 1.000 1.000 1.000 0.000 0.000 0.000 0.000
                                                        ----- ----- ----- ----- ----- ----- ----- -----

                                                        MMC COVERAGE REGIME
                                                          1     2     3

 PROBABILITY OF MMC COVERAGE REGIMES BEING  STMMCS(3)   0.780 0.110 0.110
  ADOPTED BY STATES                                     ----- ----- -----


                                                  MMC COVERAGE PORTION PER REGIME
                                                          1     2     3

 PORTION OF MMC COVERAGE PAID FOR BY STATE   STAPER(3)  0.000 1.000 1.000
  UNDER EACH OF THE MMC COVERAGE                        ----- ----- -----
  REGIMES


-------------------
FINANCIAL ASSURANCE:
-------------------

 FINANCIAL ASSURANCE GROUPS:
         1 = FINANCIAL RATIOS
         2 = TRUST FUND OR INSURANCE
         3 = SURETY BOND OR LETTER OF CREDIT

 SETTLEMENTS PERCENTAGE FOR FINANCIAL ASSURANCE  STTLE1  0.00
  GROUP 1                                                -----
 SETTLEMENTS PERCENTAGE FOR FINANCIAL ASSURANCE  STTLE2  0.00
  GROUP 2                                                -----
 SETTLEMENTS PERCENTAGE FOR FINANCIAL ASSURANCE  STTLE3  0.80
  GROUP 3                                                -----
```

```
-------------------------------------------------------------------------------------------------
------------   FACILITY CHARACTERISTICS   -------------------------------------------------------
-------------------------------------------------------------------------------------------------
-------------------------------------------------------------------------------------------------

 ------------------------
 FACILITY POPULATION DATA:
 ------------------------

  PARAMETERS OF LOG NORMAL DISTRIBUTION UPON
  WHICH FACILITY LIFETIME IS BASED                          MEAN     STANDARD    MINIMUM
                                                                       DEV
  PARAMETERS FOR EXISTING FACILITIES          CLOSE(3)   3.49651    0.7876         0.0
                                                         ---------- ---------- ----------
  PARAMETERS FOR NEW FACILITIES              NCLOSE(3)   3.49651    0.7876        15.0
                                                         ---------- ---------- ----------
     EXPECTED VALUE = EXP(MEAN + 1/2 STD.DEV. ** 2) + MINIMUM
     MEDIAN = EXP(MEAN) + MINIMUM
     LOWER BOUND = MINIMUM


                                                                   REGION
                                                            1       2      3      4
  PROBABILITY OF EACH FACILITY              DISFAC(15,4) 1 0.6732 0.6732 0.6732 0.6732
   CONFIGURATION IN EACH REGION                          2 0.1476 0.1476 0.1476 0.1476
                                                         3 0.0489 0.0489 0.0489 0.0489
                                                         4 0.0661 0.0661 0.0661 0.0661
                                                         5 0.0316 0.0316 0.0316 0.0316
                                                         6 0.0095 0.0095 0.0095 0.0095
                                                         7 0.0123 0.0123 0.0123 0.0123
                                                         8 0.0016 0.0016 0.0016 0.0016
                                                         9 0.0011 0.0011 0.0011 0.0011
                                                        10 0.0007 0.0007 0.0007 0.0007
                                                        11 0.0000 0.0000 0.0000 0.0000
                                                        12 0.0020 0.0020 0.0020 0.0020
                                                        13 0.0036 0.0036 0.0036 0.0036
                                                        14 0.0002 0.0002 0.0002 0.0002
                                                        15 0.0016 0.0016 0.0016 0.0016
                                                           ------ ------ ------ ------


  CURRENT EXCESS CAPACITY FOR
  DISPOSAL(IN %)                            XCAP           50.0
                                                           -----
```

```
------------------------------
DRINKING WATER SOURCES AND USE
------------------------------

WATER SOURCES:
              1 - GROUND WATER ONLY
              2 - SURFACE WATER ONLY
              3 - BOTH
              4 - NO RESPONSE IN DRINKING WATER SURVEY

DISTANCE FROM FACILITY TO EXPOSURE POINT (POTABLE WELL OR SURFACE WATER):
                     DISTANCE CATEGORY              LOWER BOUND(FT)            UPPER BOUND(FT)
                     -----------------              ---------------            ---------------
                             1                                490.                      1000.
                             2                               1000.                      5280.
                             3                               5280.                     26400.
                             4                              26400.                     52800.
                             -                              ------                     ------

TYPE OF WELLS:
              1 - SINGLE RESIDENTIAL AND SINGLE RESIDENTIAL & OTHERS
              2 - MUNICIPAL AND MUNICIPAL & OTHERS
              3 - OTHERS ONLY
              4.- SINGLE RESIDENTIAL & MUNICIPAL AND
                  SINGLE RESIDENTIAL, MUNICIPAL & OTHERS
              5 - NONE

DRINKING WATER USE:
              1 - UNUSED
              2 - DRINKING AND DRINKING & OTHER
              3 - RECREATION AND RECREATION & OTHER
              4 - OTHER ONLY
              5 - DRINKING & RECREATION AND
                  DRINKING & RECREATION & OTHER
              6 - NONE
```

```
THE FOLLOWING TABLES PRESENT THE DISTRIBUTION OF WELL TYPES BY DISTANCE
TO THE FACILITY FOR EACH TYPE OF DRINKING WATER SOURCE
THE DISTRIBUTIONS WERE OBTAINED FROM THE SITE VISIT SURVEY

                                   1 - GROUND WATER
                                 DISTANCE TO FACILITY
                                   1     2     3     4
               PTYWEL(1,J,1)     0.000 0.420 0.430 0.000
               PTYWEL(2,J,1)     0.000 0.320 0.330 0.000
               PTYWEL(3,J,1)     0.000 0.110 0.100 0.000
               PTYWEL(4,J,1)     0.000 0.150 0.140 0.000
               PTYWEL(5,J,1)     1.000 0.000 0.000 1.000
                                 ----- ----- ----- -----

                                   2 - SURFACE WATER
                                 DISTANCE TO FACILITY
                                   1     2     3     4
               PTYWEL(1,J,2)     0.000 0.500 0.500 0.000
               PTYWEL(2,J,2)     0.000 0.000 0.000 0.000
               PTYWEL(3,J,2)     0.000 0.500 0.500 0.000
               PTYWEL(4,J,2)     0.000 0.000 0.000 0.000
               PTYWEL(5,J,2)     1.000 0.000 0.000 1.000
                                 ----- ----- ----- -----

                                   3 - BOTH
                                 DISTANCE TO FACILITY
                                   1     2     3     4
               PTYWEL(1,J,3)     0.000 0.720 0.750 0.000
               PTYWEL(2,J,3)     0.000 0.070 0.070 0.000
               PTYWEL(3,J,3)     0.000 0.140 0.110 0.000
               PTYWEL(4,J,3)     0.000 0.070 0.070 0.000
               PTYWEL(5,J,3)     1.000 0.000 0.000 1.000
                                 ----- ----- ----- -----

                                   4 - NO RESPONSE
                                 DISTANCE TO FACILITY
                                   1     2     3     4
               PTYWEL(1,J,4)     0.000 0.300 0.350 0.000
               PTYWEL(2,J,4)     0.000 0.140 0.170 0.000
               PTYWEL(3,J,4)     0.000 0.560 0.480 0.000
               PTYWEL(4,J,4)     0.000 0.000 0.000 0.000
               PTYWEL(5,J,4)     1.000 0.000 0.000 1.000
                                 ----- ----- ----- -----
```

```
THE FOLLOWING TABLES PRESENT THE DISTRIBUTION OF SURFACE WATER USE BY DISTANCE
TO THE FACILITY FOR EACH TYPE OF DRINKING WATER SOURCE
THE DISTRIBUTIONS WERE OBTAINED FROM THE SITE VISIT SURVEY

                                   1 - GROUND WATER
                                  DISTANCE TO FACILITY
                                   1     2     3     4
                  PSWUSE(1,J,1)  0.000 0.126 0.168 1.000
                  PSWUSE(2,J,1)  0.000 0.000 0.000 0.000
                  PSWUSE(3,J,1)  0.830 0.500 0.661 0.000
                  PSWUSE(4,J,1)  0.170 0.000 0.168 0.000
                  PSWUSE(5,J,1)  0.000 0.374 0.000 0.000
                  PSWUSE(6,J,1)  0.000 0.000 0.000 0.000
                                 ----- ----- ----- -----

                                   2 - SURFACE WATER
                                  DISTANCE TO FACILITY
                                   1     2     3     4
                  PSWUSE(1,J,2)  0.000 0.000 0.000 0.000
                  PSWUSE(2,J,2)  0.000 0.000 0.000 0.000
                  PSWUSE(3,J,2)  0.333 0.000 0.500 0.000
                  PSWUSE(4,J,2)  0.000 0.000 0.500 0.000
                  PSWUSE(5,J,2)  0.667 0.000 0.000 0.000
                  PSWUSE(6,J,2)  0.000 1.000 0.000 1.000
                                 ----- ----- ----- -----

                                   3 - BOTH
                                  DISTANCE TO FACILITY
                                   1     2     3     4
                  PSWUSE(1,J,3)  0.241 0.000 0.000 0.000
                  PSWUSE(2,J,3)  0.120 0.000 1.000 0.000
                  PSWUSE(3,J,3)  0.482 0.000 0.000 0.000
                  PSWUSE(4,J,3)  0.120 0.000 0.000 0.000
                  PSWUSE(5,J,3)  0.037 1.000 0.000 0.000
                  PSWUSE(6,J,3)  0.000 0.000 0.000 1.000
                                 ----- ----- ----- -----

                                   4 - NO RESPONSE
                                  DISTANCE TO FACILITY
                                   1     2     3     4
                  PSWUSE(1,J,4)  0.000 0.167 1.000 1.000
                  PSWUSE(2,J,4)  0.000 0.000 0.000 0.000
                  PSWUSE(3,J,4)  0.375 0.333 0.000 0.000
                  PSWUSE(4,J,4)  0.375 0.333 0.000 0.000
                  PSWUSE(5,J,4)  0.250 0.167 0.000 0.000
                  PSWUSE(6,J,4)  0.000 0.000 0.000 0.000
                                 ----- ----- ----- -----
```

```
EXISTING FACILITIES:
--------------------

FACILITY OPEN YEAR:
-------------------

DISTRIBUTION OF GENERAL MAIL SURVEY RESPONSE: POPENY(10)
                          OPEN YEAR
                        1850 TO 1899       0.003
                                           -----
                        1900 TO 1909       0.009
                                           -----
                        1910 TO 1919       0.016
                                           -----
                        1920 TO 1929       0.019
                                           -----
                        1930 TO 1939       0.028
                                           -----
                        1940 TO 1949       0.073
                                           -----
                        1950 TO 1959       0.130
                                           -----
                        1960 TO 1969       0.209
                                           -----
                        1970 TO 1979       0.358
                                           -----
                        1980 TO 1983       0.155
                                           -----

RELATIONSHIP BETWEEN PART A RESPONSES AND MAIL SURVEY RESPONSES: PARTA(10,9)
                                                   PART A RESPONSE
                                1900  1910  1920  1930  1940  1950  1960  1970  1980
                   GENERAL MAIL  TO    TO    TO    TO    TO    TO    TO    TO    TO
                   SURVEY       1909  1919  1929  1939  1949  1959  1969  1979  1982

                   1850 TO 1899 0.143 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
                                ----- ----- ----- ----- ----- ----- ----- ----- -----
                   1900 TO 1909 0.286 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
                                ----- ----- ----- ----- ----- ----- ----- ----- -----
                   1910 TO 1919 0.000 0.750 0.000 0.000 0.000 0.000 0.033 0.000 0.000
                                ----- ----- ----- ----- ----- ----- ----- ----- -----
                   1920 TO 1929 0.000 0.000 0.400 0.000 0.000 0.000 0.000 0.020 0.000
                                ----- ----- ----- ----- ----- ----- ----- ----- -----
                   1930 TO 1939 0.000 0.000 0.000 0.533 0.000 0.000 0.017 0.000 0.000
                                ----- ----- ----- ----- ----- ----- ----- ----- -----
                   1940 TO 1949 0.000 0.000 0.200 0.067 0.619 0.057 0.017 0.010 0.077
                                ----- ----- ----- ----- ----- ----- ----- ----- -----
                   1950 TO 1959 0.143 0.250 0.000 0.000 0.048 0.509 0.050 0.010 0.000
                                ----- ----- ----- ----- ----- ----- ----- ----- -----
                   1960 TO 1969 0.143 0.000 0.100 0.067 0.048 0.132 0.683 0.092 0.000
                                ----- ----- ----- ----- ----- ----- ----- ----- -----
                   1970 TO 1979 0.000 0.000 0.000 0.133 0.191 0.170 0.183 0.776 0.000
                                ----- ----- ----- ----- ----- ----- ----- ----- -----
                   1980 TO 1983 0.286 0.000 0.300 0.200 0.095 0.132 0.017 0.092 0.923
                                ----- ----- ----- ----- ----- ----- ----- ----- -----
```

```
FACILITY POPULATION:
-----------------

PROBABILITY OF SURFACE IMPOUNDMENT
GIVEN PART A SURVEY RESPONSE IS YES         PROBSI(1)     0.9168
                                                          ------
PROBABILITY OF SURFACE IMPOUNDMENT
GIVEN PART A SURVEY RESPONSE IS NO          PROBSI(2)     0.4792
                                                          ------
PROBABILITY OF LANDFILL
GIVEN PART A SURVEY RESPONSE IS YES         PROBLF(1)     0.7020
                                                          ------
PROBABILITY OF LANDFILL
GIVEN PART A SURVEY RESPONSE IS NO          PROBLF(2)     0.0604
                                                          ------
PROBABILITY OF LAND TREATMENT
GIVEN PART A SURVEY RESPONSE IS YES         PROBLT(1)     0.6951
                                                          ------
PROBABILITY OF LAND TREATMENT
GIVEN PART A SURVEY RESPONSE IS NO          PROBLT(2)     0.0423
                                                          ------
PROBABILITY OF INJECTION WELL
GIVEN PART A SURVEY RESPONSE IS YES         PROBIW(1)     0.8696
                                                          ------
PROBABILITY OF INJECTION WELL
GIVEN PART A SURVEY RESPONSE IS NO          PROBIW(2)     0.0196
                                                          ------
PROBABILITY OF A FACILITY EXISTING AS
INDICATED BY THE MAIL SURVEY GIVEN IT
EXISTED AS INDICATED BY THE PHONE
VERIFICATION SURVEY                         PROBML        0.4401
                                                          ------
```

```
-----------------------------
PROCESS CHARACTERISTICS DATA:
-----------------------------

EXISTING FACILITIES:
--------------------                                                 DESIGN
                                                 1     2     3     4     5     6     7     8     9     10

 PROBABILITY OF FALLING INTO EACH OF  DIMDES(10)  0.392 0.342 0.206 0.044 0.016 0.000 0.000 0.000 0.000 0.000
  DESIGNS FOR SURFACE IMPOUNDMENTS                ----- ----- ----- ----- ----- ----- ----- ----- ----- -----

 PROBABILITY OF FALLING INTO EACH OF  LFLDES(10)  0.000 0.000 0.038 0.010 0.003 0.474 0.475 0.000 0.000 0.000
  DESIGNS FOR LANDFILLS                           ----- ----- ----- ----- ----- ----- ----- ----- ----- -----

 PROBABILITY OF FALLING INTO EACH OF  INJDES(10)  0.000 0.000 0.000 0.000 0.000 0.000 0.000 1.000 0.000 0.000
  DESIGNS FOR INJECTION WELLS                     ----- ----- ----- ----- ----- ----- ----- ----- ----- -----

 PROBABILITY OF FALLING INTO EACH OF  LTMDES(10)  0.000 0.000 0.000 0.000 0.000 0.000 0.000 1.000 0.000 0.000
  DESIGNS FOR LAND TREATMENT                      ----- ----- ----- ----- ----- ----- ----- ----- ----- -----

NEW FACILITIES:
---------------
                                                   1     2     3     4     5     6     7     8     9    10

 PROBABILITY OF FALLING INTO EACH OF  DIMDEN(10)   0.00  0.00  0.34 0.495 0.165   0.0   0.0   0.0   0.0   0.0
  DESIGNS FOR SURFACE IMPOUNDMENTS                ----- ----- ----- ----- ----- ----- ----- ----- ----- -----
   (NEW FACILITIES ONLY)

 PROBABILITY OF FALLING INTO EACH OF  LFLDEN(10)   0.00  0.00 0.340 0.495 0.165   0.0   0.0   0.0   0.0   0.0
  DESIGNS FOR LANDFILLS                           ----- ----- ----- ----- ----- ----- ----- ----- ----- -----
  (NEW FACILITIES ONLY)

 PROBABILITY OF FALLING INTO EACH OF  INJDEN(10)    0.0   0.0   0.0   0.0   0.0   0.0   0.0   1.0   0.0   0.0
  DESIGNS FOR INJECTION WELLS                     ----- ----- ----- ----- ----- ----- ----- ----- ----- -----
  (NEW FACILITIES ONLY)

 PROBABILITY OF FALLING INTO EACH OF  LTMDEN(10)   0.00  0.00  0.00  0.00  0.00   1.0   0.0   0.0   0.0   0.0
  DESIGNS FOR LAND TREATMENT                      ----- ----- ----- ----- ----- ----- ----- ----- ----- -----
   (NEW FACILITIES ONLY)
```

```
--------------------
SIZE (SURFACE AREA):
--------------------

EXISTING FACILITIES:
--------------------

                                                      PROB. OF    LOWER BND   UPPER BND
                                                     OCCURRENCE    OF SIZE     OF SIZE
                                                                   (ACRES)     (ACRES)

 PROBABILITY DISTRIBUTION OF         DIMSZ (10,3)  1     0.143       0.01        0.1
  SIZE CATEGORIES FOR EXISTING                     2     0.451       0.10        1.0
  DISPOSAL SURFACE IMPOUNDMENT                     3     0.181       1.0         3.0
  FACILITIES                                       4     0.128       3.0         7.0
                                                   5     0.007       7.0         9.0
                                                   6     0.030       9.0        10.0
                                                   7     0.045      10.0        26.0
                                                   8     0.015      26.0       100.0
                                                   9     0.0         0.0         0.0
                                                  10     0.0         0.0         0.0
                                                     ----------  ----------  ----------

 PROBABILITY DISTRIBUTION OF         LDFSZ (10,3)  1     0.18        0.01        0.50
  SIZE CATEGORIES FOR EXISTING                     2     0.24        0.50        4.1
  LANDFILL FACILITIES                              3     0.02        4.10        6.8
                                                   4     0.20        6.8        14.7
                                                   5     0.11       14.7        27.5
                                                   6     0.18       27.5       142.0
                                                   7     0.07      142.0       468.0
                                                   8     0.0         0.0         0.0
                                                   9     0.0         0.0         0.0
                                                  10     0.0         0.0         0.0
                                                     ----------  ----------  ----------

 PROBABILITY DISTRIBUTION OF         LTMSZ (10,3)  1     0.10        0.10        1.0
  SIZE CATEGORIES FOR EXISTING                     2     0.30        1.0         7.0
  LAND TREATMENT FACILITIES                        3     0.10        7.0        10.0
                                                   4     0.033      10.0        13.0
                                                   5     0.067      13.0        15.0
                                                   6     0.30       15.0        60.0
                                                   7     0.033      60.0       100.0
                                                   8     0.034     100.0       188.0
                                                   9     0.033     188.0       680.0
                                                  10     0.0         0.0         0.0
                                                     ----------  ----------  ----------

 PROBABILITY DISTRIBUTION OF         INJSZ (10,3)  1     1.0         0.5         0.5
  SIZE CATEGORIES FOR EXISTING                     2     0.0         0.0         0.0
  INJECTION WELL FACILITIES                        3     0.0         0.0         0.0
                                                   4     0.0         0.0         0.0
                                                   5     0.0         0.0         0.0
                                                   6     0.0         0.0         0.0
                                                   7     0.0         0.0         0.0
                                                   8     0.0         0.0         0.0
                                                   9     0.0         0.0         0.0
                                                  10     0.0         0.0         0.0
                                                     ----------  ----------  ----------
```

```
NEW FACILITIES:
---------------

                                                        PROB. OF     LOWER BND   UPPER BND
                                                       OCCURRENCE    OF SIZE     OF SIZE
                                                                      (ACRES)     (ACRES)
PROBABILITY DISTRIBUTION OF          DIMSZN(10,3)  1       0.0          0.01        0.10
 SIZE CATEGORIES FOR NEW                           2       .526         0.10        1.0
 DISPOSAL SURFACE IMPOUNDMENT                      3       .211         1.0         3.0
 FACILITIES                                        4       .149         3.0         7.0
                                                   5       .008         7.0         9.0
                                                   6       .035         9.0        10.0
                                                   7       .053        10.0        26.0
                                                   8       .018        26.0       100.0
                                                   9       0.0          0.0         0.0
                                                  10       0.0          0.0         0.0
                                                     ----------  ----------  ----------
PROBABILITY DISTRIBUTION OF          LDFSZN(10,3)  1       0.0          0.01        0.50
 SIZE CATEGORIES FOR NEW                           2       0.29         0.50        4.1
 LANDFILL FACILITIES                               3       0.03         4.10        6.8
                                                   4       0.24         6.8        14.7
                                                   5       0.13        14.7        27.5
                                                   6       0.22        27.5       142.0
                                                   7       0.09       142.0       468.0
                                                   8       0.0          0.0         0.0
                                                   9       0.0          0.0         0.0
                                                  10       0.0          0.0         0.0
                                                     ----------  ----------  ----------
PROBABILITY DISTRIBUTION OF          LTMSZN(10,3)  1       0.00         0.10        1.0
 SIZE CATEGORIES FOR NEW                           2       0.333        1.0         7.0
 LAND TREATMENT FACILITIES                         3       0.111        7.0        10.0
                                                   4       0.037       10.0        13.0
                                                   5       0.074       13.0        15.0
                                                   6       0.333       15.0        60.0
                                                   7       0.037       60.0       100.0
                                                   8       0.038      100.0       188.0
                                                   9       0.037      188.0       680.0
                                                  10       0.0          0.0         0.0
                                                     ----------  ----------  ----------
PROBABILITY DISTRIBUTION OF          INJSZN(10,3)  1       1.0          0.5         0.5
 SIZE CATEGORIES FOR NEW                           2       0.0          0.0         0.0
 INJECTION WELL FACILITIES                         3       0.0          0.0         0.0
                                                   4       0.0          0.0         0.0
                                                   5       0.0          0.0         0.0
                                                   6       0.0          0.0         0.0
                                                   7       0.0          0.0         0.0
                                                   8       0.0          0.0         0.0
                                                   9       0.0          0.0         0.0
                                                  10       0.0          0.0         0.0
                                                     ----------  ----------  ----------
```

```
DECONTAMINATION OF FACILITIES AT CLOSURE:
-----------------------------------------

AT CLOSURE THE O/O MAY CHOOSE TO REMOVE ALL WASTES TO AN OFF-SITE
LOCATION OR TO A DISPOSAL LOCATION ON-SITE.  THIS REMOVAL ELIMINATES
THE NEED FOR POST-CLOSURE CARE FOR THAT PROCESS.  ONLY SMALL
PROCESSES WILL BE DECONTAMINATED DUE TO THE HIGH COSTS OF EXCAVATION
AND TRANSPORTATION.

SURFACE IMPOUNDMENTS:  SURFACE IMPOUNDMENTS WITH AREA LESS
---------------------  THAN X ACRES WILL DECONTAMINATE.
          ENTER X ==>                      SIZMAX(1)         0.20
                                                            -----

          SURFACE IMPOUNDMENTS WITH AREA EXCEEDING X ACRES BUT
          LESS THAN Y ACRES WILL DECONTAMINATE IFF A LANDFILL OF
          SIZE EXCEEDING Z EXISTS ON-SITE.
          ENTER Y ==>                      SIZMAX(2)         0.50
          ENTER Z ==>                      LFZMIN            5.00
                                                            -----

LANDFILLS:  LANDFILLS WITH AREA LESS THAN X ACRES
----------  WILL DECONTAMINATE.
          ENTER X ==>                      LFZMAX(1)         0.10
                                                            -----

          LANDFILLS WITH AREA EXCEEDING X ACRES BUT LESS THAN
          Y ACRES WILL DECONTAMINATE IFF A SURFACE IMPOUNDMENT OF
          SIZE EXCEEDING Z EXISTS ON-SITE.
          ENTER Y ==>                      LFZMAX(2)         0.25
          ENTER Z ==>                      SIZMIN            5.00
                                                            -----

LAND TREATMENT:  LAND TREATMENT WITH AREA LESS THAN X ACRES
---------------  WILL DECONTAMINATE.
          ENTER X ==>                      LTZMAX(1)         0.00
                                                            -----

          LAND TREATMENT WITH AREA EXCEEDING X ACRES BUT LESS THAN
          Y ACRES WILL DECONTAMINATE IFF A SUITABLE DISPOSAL
          LOCATION IS AVAILABLE ON-SITE.
          ENTER Y ==>                      LTZMAX(2)         0.00
                                                            -----
```

```
------------------------------------------------------------------------------------------
------------    COST DATA    -------------------------------------------------------------
------------------------------------------------------------------------------------------

-----------------------
POST-CLOSURE CARE COSTS:
-----------------------

                                                        1     2     3     4     5     6     7     8     9
 UPPER BOUND, MEDIAN AND LOWER        CRCOEF(9,3)   1   60.   60.   2.4  355.  591. 1030.  210.   0.6  200.
  BOUND FOR EACH OF THE 9 COEFFICIENTS              2   89.  118.   5.9  473. 1182. 1415.  830.   1.8 1017.
  OF THE CARE COST EQUATION                         3  118.  176.  11.8  591. 1773. 1800. 1450.   3.0 3074.
   CRCOEF(9,1)=LOWER BOUND                             ----- ----- ----- ----- ----- ----- ----- ----- -----
   CRCOEF(9,2)=MEDIAN
   CRCOEF(9,3)=UPPER BOUND
  ALL COEFFICIENTS ARE FOR COSTS IN FIRST QUARTER 1982 DOLLARS

    THE COEFFICIENTS ARE AS FOLLOWS:
    1 -- MAINTAIN BENCHMARKS: $
    2 -- MAINTAIN SOIL INTEGRITY (CAP): $/ACRE
    3 -- SECURITY: $/ACRE
    4 -- FENCE MAINTENANCE: $/ACRE  0.5
    5 -- GAS MONITORING: $
    6 -- LEACHATE MONITORING: $
    7 -- LEACHATE COLLECTION AND REMOVAL: $/ACRE  0.477
    8 -- LEACHATE TREATMENT: ¢/GAL
    9 -- "IMPROVED" EROSION CARE: $/ACRE  0.310

  PROBABILITY THAT SECURITY           SECUR             1.000
   IS REQUIRED IN THE POST-                             -----
   CLOSURE PERIOD

  PROBABILITY THAT FENCE              FENCE             1.000
   MAINTENANCE IS REQUIRED IN                           -----
   THE POST-CLOSURE PERIOD

  PROBABILITY THAT GAS MONITORING     GAS               0.050
   IS REQUIRED IN THE POST-                             -----
   CLOSURE PERIOD.

 PROBABILITY THAT LEACHATE            LEACH1            1.000
  MONITORING IS REQUIRED AT                             -----
  FACILITIES WITH LEACHATE
  COLLECTION SYSTEMS THROUGHOUT
  THE POST-CLOSURE PERIOD

 PROBABILITY THAT LEACHATE            LEACH2            1.000
  COLLECTION AND REMOVAL IS                             -----
  REQUIRED AT FACILITIES THAT
  MONITOR LEACHATE COLLECTION SYSTEMS.

 PROBABILITY THAT LEACHATE TREATMENT  LEACH3            1.000
  IS REQUIRED AT FACILITIES THAT                        -----
  COLLECT AND REMOVE LEACHATE
                                                           DESIGN
                                                        1 2 3 4 5 6 7 8 9 10

 SPECIFICATION OF THOSE DESIGNS       LEACHD(10)        1 1 1 1 1 0 1 0 0 0
  WITH LEACHATE COLLECTION                              - - - - - - - - - -
  SYSTEMS (1=YES, 0=NO)
```

```
----------------
MONITORING COSTS:
----------------

 RANGE OF WELL SAMPLING COSTS IN DOLLARS
 FOR MONITORING INDICATING PARAMETERS          ISAMP(2)  1000.   2000.
                                                         ------  ------

 WELL LIFE IN YEARS                            WELLIF     30
                                                          ---

 RANGE OF CAPITAL COSTS FOR WELL CONSTRUCTION  WELCAP(2) 25000.  50000.
                                                         ------  ------

 RANGE OF WELL SAMPLING COSTS IN DOLLARS
 FOR MONITORING CONSTITUENTS                   CONSAM(2)  1750.   3000.
                                                         ------  ------

-----------------------------------
PLUME DELINEATION AND TRACKING COSTS:
-----------------------------------

   THE FOLLOWING TABLE MAPS THE CAPITAL COST(K) OF PLUME DELINEATION
   AND TRACKING BASED ON AFFECTED AREA AND DEPTH.

                                       PD/T K COSTS  (IN 1,000 OF 1982$)
                                                PLUME SIZE(FT**2)
          DEPTH    20000.    50000.   500000.  1250000.  2000000.  5000000.  8000000. 20000000.
          (FT)
            25.      15.0      15.0      32.5      37.5      40.0      46.0      59.0      80.0
            50.      22.5      22.5      44.0      50.0      56.0      65.0      80.0     108.0
            75.      26.0      26.0      55.0      65.0      73.0      85.0     104.0     138.0
           100.      34.0      34.0      67.5      82.5      91.0     104.0     126.0     170.0
           200.      60.0      60.0     120.0     138.0     153.0     187.5     225.0     300.0
       -------   -------   -------   -------   -------   -------   -------   -------   -------
```

```
---------------
RESPONSE COSTS:
---------------

                                                      LOWER  MEDIAN UPPER

 RANGE OF THE COEFFICIENT FOR           SEAL(3)       6500.  20000. 40000.
 SURFACE SEALING COSTS ($/ACRE)                       ------ ------ ------

   THE FOLLOWING TABLE CONTAINS COST ESTIMATES (CAPITAL EXPENDITURES, K,
   OPERATION AND MAINTENANCE, O&M) FOR FLUID REMOVAL AND TREATMENT,
   AND PLUME DELINEATION.

                         PROBABILITIES OF ON-SITE AND OFF-SITE FLUID REMOVAL AND TREATMENT
                                                    (1000S OF 1982 $)
                  PLUME SIZE (FT**2)
                              3495.   20198.   89102.  279992.  538838.  987773. 2428574. 5102554.
                   -K-
                   0.0000     173.6    202.7    210.7    242.5    262.3    314.8    417.0    417.0
                   0.1875     237.9    262.5    276.6    314.5    448.0    438.9    697.3    697.3
                   0.5000     291.1    326.2    351.4    422.8    686.4    675.2   1111.2   1197.9
                   0.8125     387.7    418.7    440.2    683.5   1167.6   2452.8   2452.8   6548.0
                   1.0000     434.1    490.2    603.5   1293.8   3108.4   3990.4   4465.9   9697.7
                            -------  -------  -------  -------  -------  -------  -------  -------
                   -O&M-
                   0.0000      22.7     31.5     34.9     36.0     48.0     53.1     76.4     76.4
                   0.1875      30.5     38.1     43.5     47.8     73.0     76.0    113.2    118.0
                   0.5000      39.2     48.8     55.6     75.4    121.9    121.9    210.7    243.3
                   0.8125      53.3     59.6     74.2    118.8    226.3    338.5    338.5   1299.1
                   1.0000      59.7     70.3    111.4    241.9    464.1    649.3    767.0   2565.6
                            -------  -------  -------  -------  -------  -------  -------  -------

   PLUME CHARACTERISTICS:
   ----------------------
   OFF-SITE PLUME DISPERSION COEFFICIENTS USED TO SIMULATE PLUME SIZE

                                       DISPERSION
                        PROBABILITY   COEFFICIENT
                            0.0           .05
                             .5           .1
                            1.0           .2
                            ----         ----
```

```
-------------
CLAIMS COSTS:
-------------

PERSONAL INJURY:
----------------

 THE FOLLOWING TABLES DESCRIBE CHARACTERISTICS OF THE U.S. POPULATION.

          1980 POPULATION DISTRIBUTION FOR EACH AGE CATEGORY

          AGE GROUP(YRS.)        LABEL           POPULATION

             0 -  9            POPIYR(1,1)         0.1459
            10 - 19            POPIYR(1,2)         0.1740
            20 - 29            POPIYR(1,3)         0.1803
            30 - 39            POPIYR(1,4)         0.1392
            40 - 49            POPIYR(1,5)         0.1005
            50 - 59            POPIYR(1,6)         0.1030
            60 - 69            POPIYR(1,7)         0.0833
            70 - 79            POPIYR(1,8)         0.0512
            80 - 89            POPIYR(1,9)         0.0197
            90 +               POPIYR(1,10)        0.0032
                                                 ----------

          NUMBER OF BIRTHS PER 1000 PEOPLE OVER 10 YEAR PERIOD

          AGE GROUP(YRS.)         LABEL        NUMBER OF BIRTHS

            10 - 19              BIRTH(1)          147.0
            20 - 29              BIRTH(2)          576.7
            30 - 39              BIRTH(3)          212.3
            40 - 49              BIRTH(4)           10.8
                                                   -----

          PROBABILITY OF DEATH WITHIN NEXT 10 YEARS BY AGE CATEGORY

          AGE GROUP(YRS.)         LABEL        PROBABILITY OF DEATH

             0 -  9              PDEATH(1)         0.0198
            10 - 19              PDEATH(2)         0.0070
            20 - 29              PDEATH(3)         0.0129
            30 - 39              PDEATH(4)         0.0159
            40 - 49              PDEATH(5)         0.0374
            50 - 59              PDEATH(6)         0.0892
            60 - 69              PDEATH(7)         0.1904
            70 - 79              PDEATH(8)         0.3827
            80 - 89              PDEATH(9)         0.6850
            90 +                 PDEATH(10)        1.0000
                                                 ----------
```

```
DISABILITY CHARACTERISTICS BY AGE CATEGORY

AGE GROUP(YRS.)        VALUE OF          NO. OF DISABILITY
                    DISABILITY DAY        DAYS PER YEAR
                       (1982 $)

   0 -  9               0.00                0.00
  10 - 19              13.36                0.55
  20 - 29              54.51                1.22
  30 - 39              67.77                0.95
  40 - 49              70.90                1.20
  50 - 59              68.61                1.76
  60 - 69              64.52                2.17
  70 - 79               0.00                0.00
  80 - 89               0.00                0.00
  90 +                  0.00                0.00
                     -------               -----

                    MEDICAL COSTS

AGE GROUP(YRS.)         LABEL          MEDICAL COSTS PER YEAR
                                       ($/PERSON/YEAR)

   0 -  9             MEDICL(1)           145.16
  10 - 19             MEDICL(2)            81.96
  20 - 29             MEDICL(3)           142.43
  30 - 39             MEDICL(4)           225.52
  40 - 49             MEDICL(5)           239.91
  50 - 59             MEDICL(6)           378.32
  60 - 69             MEDICL(7)           686.03
  70 - 79             MEDICL(8)          1139.20
  80 - 89             MEDICL(9)          1140.13
  90 +                MEDICL(10)          767.14
                                         -------

                    MEDICAL MONITORING COSTS

AGE GROUP(YRS.)         LABEL          MEDICAL MONITORING COSTS
                                       ($/PERSON/YEAR)

   0 -  9             MEDMON(1)           160.
  10 - 19             MEDMON(2)           160.
  20 - 29             MEDMON(3)           160.
  30 - 39             MEDMON(4)           160.
  40 - 49             MEDMON(5)           160.
  50 - 59             MEDMON(6)           160.
  60 - 69             MEDMON(7)           160.
  70 - 79             MEDMON(8)           160.
  80 - 89             MEDMON(9)           160.
  90 +                MEDMON(10)          160.
                                          -----
```

```
REAL INCREASES OVER TIME IN PRICES AND WAGES (CUMULATIVE CHANGES)

          IN PRICES FOR  IN INTENSITY  IN WAGES     IN WAGES
         PERSONAL HEALTH  OF HEALTH      FOR          FOR
          CARE SERVICES   CARE USE    DISABILITY   MORTALITY
BY YEAR     RLMED(19)     MEDINT(19)  RLDISA(19)   RLMORT(19)
-------   -------------   --------    ----------   ---------
     1       1.0           1.0          1.0          1.0
    11       1.219         1.105        1.122        1.122
    21       1.464         1.220        1.302        1.302
    31       1.666         1.348        1.511        1.511
    41       1.859         1.489        1.754        1.754
    51       2.074         1.645        2.035        2.035
    61       2.313         1.817        2.362        2.362
    71       2.581         2.007        2.741        2.741
    81       2.791         2.217        3.181        3.181
    91       3.212         2.449        3.692        3.692
   101       3.583         2.705        4.285        4.285
   111       3.583         2.705        4.285        4.285
   121       3.583         2.705        4.285        4.285
   131       3.583         2.705        4.285        4.285
   141       3.583         2.705        4.285        4.285
   151       3.583         2.705        4.285        4.285
   161       3.583         2.705        4.285        4.285
   171       3.583         2.705        4.285        4.285
   181       3.583         2.705        4.285        4.285
           ------        ------       ------       -------

                       MEDIAN ANNUAL WAGES BY AGE

                                 ANNUAL          REMAINING LIFE
           AGE GROUP(YRS.)    WAGE(1982 $)          (YEARS)
                                WAGE(10)           REMLIF(10)

              0 -  9              0.0                  70
             10 - 19           8687.0                  61
             20 - 29          14181.0                  51
             30 - 39          17621.0                  42
             40 - 49          18433.0                  33
             50 - 59          17838.0                  24
             60 - 69          16776.0                  17
             70 - 79              0.0                  11
             80 - 89              0.0                   3
             90 +                 0.0                   0
                              --------                ---
```

```
FRACTION OF DEATHS ATTRIBUTABLE TO DISEASES OF INTEREST BY AGE

          AGE GROUP(YRS.)          FRACTION
                                   DIFRAC(10)

             0 -  9                 0.7796
            10 - 19                 0.1867
            20 - 29                 0.1705
            30 - 39                 0.3089
            40 - 49                 0.4228
            50 - 59                 0.4805
            60 - 69                 0.4685
            70 - 79                 0.4121
            80 - 89                 0.3569
            90 +                    0.2764
                                    ------

FRACTION OF ATTRIBUTABLE DEATHS THAT REMAIN ATTRIBUTABLE IN FUTURE

                                   FRACTION
          BY YEAR                  DIFADJ(19)
          -------                  --------
              1                     1.0000
             11                     1.0000
             21                     1.0000
             31                     1.0000
             41                     1.0000
             51                     1.0000
             61                     1.0000
             71                     1.0000
             81                     1.0000
             91                     1.0000
            101                     1.0000
            111                     1.0000
            121                     1.0000
            131                     1.0000
            141                     1.0000
            151                     1.0000
            161                     1.0000
            171                     1.0000
            181                     1.0000
                                    ------

MINIMUM AGE FOR COMPUTING MORTALITY CLAIMS    MINAGE       16<
                                                          ----
```

```
REAL PROPERTY:
--------------

 INITIAL HOUSING VALUES NEAR THE SITE    HOSVL1            0.50
 EXPRESSED AS A FRACTION OF MEDIAN (0-1)                   -----

 INITIAL FARMLAND VALUES NEAR THE SITE   FRMVL1            0.50
 EXPRESSED AS A FRACTION OF MEDIAN                         -----
 COUNTY VALUES (0-1)

 FRACTION OF PROPERTY DEVALUED DUE TO    RPDEV(1)          0.15
 DETECTABLE RELEASE OFF SITE                               -----

 FRACTION OF PROPERTY DEVALUED DUE TO    RPDEV(2)          0.30
 DETECTABLE AND TOXIC RELEASE OFF SITE                     -----

 FREQUENCY OF REAL PROPERTY CLAIMS       RPFREQ(1)         1.00
 DUE TO DETECTABLE RELEASE OFF SITE                        -----

 FREQUENCY OF REAL PROPERTY CLAIMS       RPFREQ(2)         1.00
 DUE TO DETECTABLE AND TOXIC RELEASE                       -----
 OFF SITE

ECONOMIC LOSS:
--------------

  THE FOLLOWING TABLE CONTAINS THE COSTS OF AN ALTERNATE WATER SUPPLY:  WATSUP(9,2)

                         POPULATION      CAPITAL        O&M     (1000S OF 1983 $)
                          SERVED          COSTS        COSTS

                   1.    <=99.            300.0          9.3
                   2.    <=499.           360.0         11.2
                   3.    <=999.           540.0         17.9
                   4.    <=2499.          910.0         34.1
                   5.    <=4999.         1585.0         52.8
                   6.    <=9999.         2120.0         87.1
                   7.    <=99999.        9135.0        269.0
                   8.    <=999999.      45265.0       1760.0
                   9.    >=1000000.    292115.0      15900.0
                          --------     --------    ----------

NATURAL RESOURCE LOSS:
----------------------

   DREDGING  ($/SITE)                  DREDGE    588530.
                                                 -------
   FISH LOSS  ($/SITE)                 FISH        1500.
                                                 -------
   RECREATION LOSS  ($/YEAR)           RECR       16640.
                                                 -------
```

```
------------------------------------------------------------------------------------------------
------------     KNOWLEDGE/ACTION DATA     -----------------------------------------------------
------------------------------------------------------------------------------------------------


THE FOLLOWING TABLE IDENTIFIES THE ABILITY OF EACH OF THE
7 RELEASE TYPES TO BE DETECTED BY THE 10 ACTIONS, WHERE
TRUE = CAPABLE OF DETECTION AND FALSE = NOT CAPABLE
THE ACTIONS ARE:     1. IP-ON            6. SURFACE SEALING
                     2. CONST-ON         7. FLR/T-ON
                     3. PD/PT-ON         8. FLR/T-OFF
                     4. CONST-OFF        9. CARE
                     5. PD/PT-OFF       10. EXPOSURE

LABEL: MONABL(7,10)
                                                     ACTIONS
                                         1    2    3    4    5    6    7    8    9   10

                             IP-ON       T    T    T    F    F    F    T    F    F    F
                             DET-ON      F    T    T    F    F    F    T    F    F    F
                             TOX-ON      F    T    T    F    F    F    T    F    F    F
          RELEASE TYPE       T/O OFF     F    F    F    F    F    F    F    F    F    T
                             DET-OFF     F    F    F    T    T    F    F    T    F    F
                             TOX-OFF     F    F    F    T    T    F    F    T    F    F
                             BATHTUB     T    T    T    T    T    T    T    T    T    F
                                         -    -    -    -    -    -    -    -    -    -


THE FOLLOWING TABLE INDICATES THE HIERARCHY OF ACTIONS, WHERE
        0 = NEW ACTION HAS NO EFFECT ON EXISTING ACTION AND
            EXISTING ACTION HAS NO EFFECT ON NEW ACTION
        1 = NEW ACTION TURNS OFF EXISTING ACTION
       -1 = EXISTING ACTION PREVENTS NEW ACTION FROM STARTING
THE ACTIONS ARE:     1. IP-ON            6. SURFACE SEALING
                     2. CONST-ON         7. FLR/T-ON
                     3. PD/PT-ON         8. FLR/T-OFF
                     4. CONST-OFF        9. CARE
                     5. PD/PT-OFF       10. EXPOSURE

LABEL: HIERAC(10,10)
                                                     EXISTING ACTION
                             NEW ACTION  1    2    3    4    5    6    7    8    9   10

                                01       0   -1   -1    0    0    0   -1    0    0    0
                                02       1    0   -1    0    0    0   -1    0    0    0
                                03       1    1    0    0    0    0   -1    0    0    0
                                04       0    0    0    0   -1    0    0   -1    0    0
                                05       0    0    0    1    0    0    0   -1    0    0
                                06       0    0    0    0    0    0    0    0    0    0
                                07       1    1    1    0    0    0    0    0    0    0
                                08       0    0    0    1    1    0    0    0    0    0
                                09       0    0    0    0    0    0    0    0    0    0
                                10       0    0    0    0    0    0    0    0    0    0
                                         -    -    -    -    -    -    -    -    -    -
```

```
THE FOLLOWING TABLE CONTAINS PREVIOUS KNOWLEDGE CONDITIONS,
WHERE:  F = NOT NEEDED
        T = REQUIRED                                    EXISTING KNOWLEDGE STATE
                                 CHANGE IN
                                 KNOWLEDGE STATE   1     2     3     4     5     6     7

                                 1  IP ON-SITE     F     F     F     F     F     F     F
                                 2  DET ON-SITE    F     F     F     F     F     F     F
                                 3  TOX ON-SITE    F     T     F     F     F     F     F
LABEL: PREKNO(7,7)               4  T/O OFF-SITE   F     F     F     F     F     F     F
                                 5  DET OFF-SITE   F     F     F     F     T     F     F
                                 6  TOX OFF-SITE   F     F     F     F     F     F     F
                                 7  BATHTUB        F     F     F     F     F     F     F
                                                   -     -     -     -     -     -     -

THE FOLLOWING TABLE INDICATES THE SUBSTITUTE ACTION FOR ACTIONS WHICH
CANNOT BE IMPLEMENTED DUE TO A LACK OF FUNDING
 THE ACTIONS ARE:     1. IP-ON              6. SURFACE SEALING
                      2. CONST-ON           7. FLR/T-ON
                      3. PD/PT-ON           8. FLR/T-OFF
                      4. CONST-OFF          9. CARE
                      5. PD/PT-OFF         10. EXPOSURE
                                                       SUBSTITUTE ACTION
                                             1   2   3   4   5   6   7   8   9  10
                          ACTION CANNOT
                            IMPLEMENT   01   0   1   0   0   0   0   0   0   0   0
                                        02   1   0   0   0   0   0   0   0   0   0
                                        03   0   1   0   0   0   0   0   0   0   0
                                        04   0   0   0   0   1   0   0   0   0   0
TABLE SUBMAT(10,10):                    05   0   0   0   1   0   0   0   0   0   0
                                        06   0   0   0   0   0   0   0   0   0   0
                                        07   0   0   0   0   0   1   0   0   0   0
                                        08   0   0   0   0   0   0   1   0   0   0
                                        09   0   0   0   0   0   0   0   0   0   0
                                        10   0   0   0   0   0   0   0   0   0   0
                                             -   -   -   -   -   -   -   -   -   -

THE FOLLOWING TABLE INDICATES THE NEW ACTIONS TO BE TAKEN AT THE
NORMAL COMPLETION OF AN ACTION
 THE ACTIONS ARE:     1. IP-ON              6. SURFACE SEALING
                      2. CONST-ON           7. FLR/T-ON
                      3. PD/PT-ON           8. FLR/T-OFF
                      4. CONST-OFF          9. CARE
                      5. PD/PT-OFF         10. EXPOSURE
INPUT A 1 IF NEW ACTION SHOULD BE STARTED DUE TO OLD ACTION ENDING
                                                          NEW ACTION
                                ACTION ENDING   1   2   3   4   5   6   7   8   9  10

                                           01   0   0   0   0   0   0   0   0   0   0
                                           02   1   0   0   0   0   0   0   0   0   0
                                           03   1   0   0   0   0   0   0   0   0   0
                                           04   1   0   0   0   0   0   0   0   0   0
TABLE RESET(10,10):                        05   1   0   0   0   0   0   0   0   0   0
                                           06   0   0   0   0   0   0   0   0   0   0
                                           07   1   0   0   0   0   0   0   0   0   0
                                           08   1   0   0   0   0   0   0   0   0   0
                                           09   0   0   0   0   0   0   0   0   0   0
                                           10   0   0   0   0   0   0   0   0   0   0
                                                -   -   -   -   -   -   -   -   -   -
```

```
------------------------------------------------------------------------------------------------------------
------------    OTHER DATA    ------------------------------------------------------------------------------
------------------------------------------------------------------------------------------------------------

                                                                      REGION
                                                             1      2      3      4

 PERCENTAGE OF WASTE GENERATED          DISTWR(4)          0.31   0.27   0.30   0.12
  IN EACH REGION                                           -----  -----  -----  -----

  NUMBER OF STATES                         NSTATE          54
                                                           ---

 STATE CHARACTERISTICS:     STATE(55,6)

                                                            CLAIM     MMC
FIPS  NAME                  ABBR.    REG.      LEGREG      COV.      COV.
                                     (1-4)     (1-7)      (1-8)     (1-3)
 02   ALASKA                 AK       4
 01   ALABAMA                AL       2
 05   ARKANSAS               AR       2
 04   ARIZONA                AZ       4
 06   CALIFORNIA             CA       4
 08   COLORADO               CO       4
 09   CONNECTICUT            CT       1
 11   DISTRICT OF COLUMBIA   DC       1
 10   DELAWARE               DE       1
 12   FLORIDA                FL       2
 13   GEORGIA                GA       2
 66   GUAM                   GU       4
 15   HAWAII                 HI       4
 19   IOWA                   IA       3
 16   IDAHO                  ID       4
 17   ILLINOIS               IL       3
 18   INDIANA                IN       3
 20   KANSAS                 KS       3
 21   KENTUCKY               KY       2
 22   LOUSIANA               LA       2
 25   MASSACHUSETTS          MA       1
 24   MARYLAND               MD       1
 23   MAINE                  ME       1
 26   MICHIGAN               MI       3
 27   MINNESOTA              MN       3
 29   MISSOURI               MO       3
 28   MISSISSIPPI            MS       2
 30   MONTANA                MT       3
 37   NORTH CAROLINA         NC       2
 38   NORTH DAKOTA           ND       4
 31   NEBRASKA               NE       3
 33   NEW HAMPSHIRE          NH       1
 34   NEW JERSEY             NJ       1
```

```
35   NEW MEXICO              NM    4
32   NEVADA                  NV    4
36   NEW YORK                NY    1
39   OHIO                    OH    3
40   OKLAHOMA                OK    2
41   OREGON                  OR    4
42   PENNSYLVANIA            PA    1
72   PUERTO RICO             PR    1
44   RHODE ISLAND            RI    1
45   SOUTH CAROLINA          SC    2
46   SOUTH DAKOTA            SD    4
47   TENNESSEE               TN    2
48   TEXAS                   TX    2
49   UTAH                    UT    4
51   VIRGINIA                VA    1
78   VIRGIN ISLAND           VI    1
50   VERMONT                 VT    1
53   WASHINGTON              WA    4
55   WISCONSIN               WI    3
54   WEST VIRGINA            WV    1
56   WYOMING                 WY    4
--   -----------------       --    -     --    --    --

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 ------------    END OF DATA  ----------------------------------------------------------------------
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```